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THE JOURNAL

— OF THE —

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 1

Jacksonville, Florida, July, 1933 -34

Yearly Subscription, \$3.00
Single Copy, 30c

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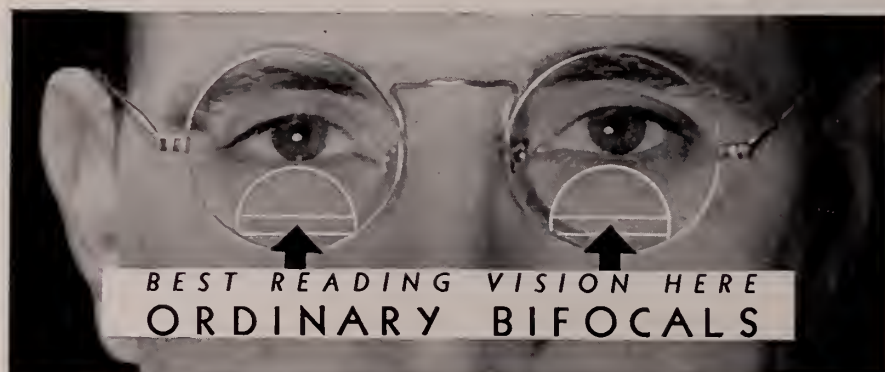


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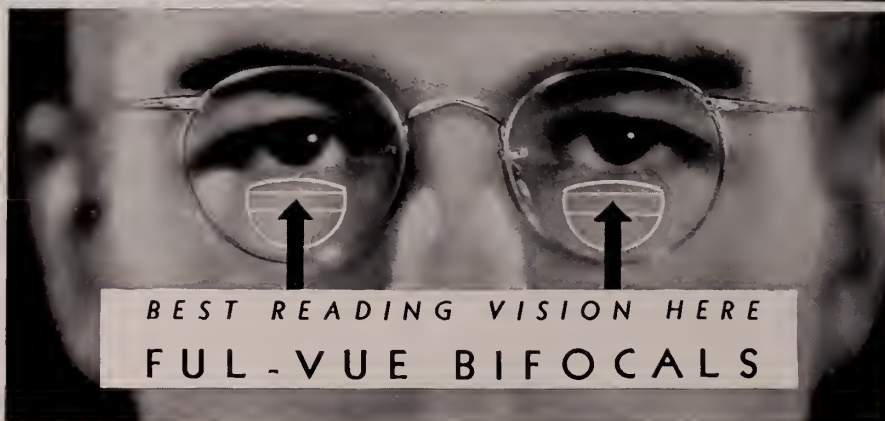
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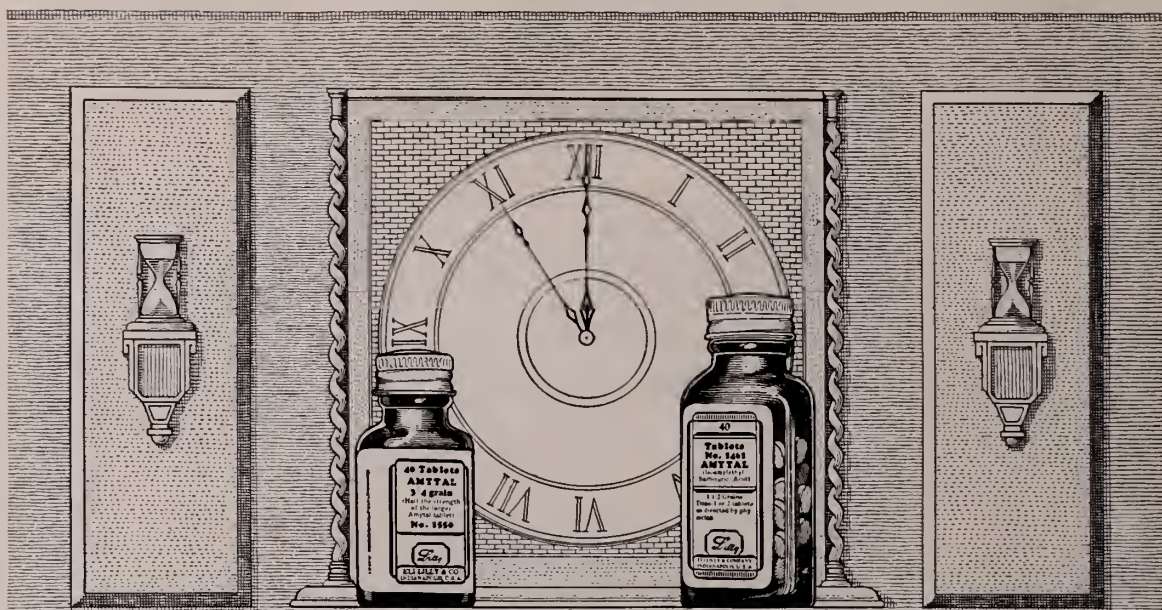
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PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, July, 1933

Number 1

TREATMENT OF HEMOPHILIA WITH OVARIAN EXTRACT—REPORT OF TWO CASES*

JOSEPH S. SPOTO, M.D.,
Tampa.

Hemophilia is a hereditary disease of males transmitted only by the female, characterized by a marked tendency to hemorrhage, spontaneously or following trauma, and by a prolonged coagulation time of the blood.

With the exception of its hereditary tendencies, the etiology of hemophilia has been obscure, and the consensus of opinion has been that the blood platelets, although normal in number and morphology, are defective in nature so that clotting of the blood does not occur normally. In 1931, Dr. Carroll Birch of Chicago¹, confirmed the above theory by demonstrating that platelets of hemophilic blood were resistant to hypotonic as well as hypertonic salt solutions. She has also shown that if this resistance of the platelets is overcome by traumatization the coagulation time is reduced considerably.

Since the disease occurs only in the male, she reasoned that there must be something lacking in the male organism which is present in the potential transmitting female hemophiliac preventing the development of clinical manifestations of the disease. Working on this theory she has treated 19 cases of hemophilia with ovarian extract obtaining excellent results². Nine of these cases have shown a very definite improvement, while nine cases have shown a less marked improvement. One case did not respond to the treatment. She has grouped her results under the headings of general and specific, the general improvement being indicated by an increase in weight, hemoglobin and vitality; the specific improvement being indicated by a decrease in number and severity of the hemorrhages and a lowering of the coagulation time. One of the patients, a severe hemophiliac, was given ovarian extract for a period of one month, until the blood findings became nor-

mal. Then, a fresh human ovarian transplant was made into the anterior abdominal wall, and the patient remained symptom-free and with normal blood findings for a period of five months.

Dr. Birch³, at the suggestion of Dr. A. J. Carlson, demonstrated that when urine from normal males was concentrated and injected in sufficient quantities into castrated female rats, an estrus cycle was produced. Urines of five hemophiliacs failed to do this. She has also demonstrated that urine of two transmitters did not produce an estrus cycle in the rats, thereby showing that there is a substance, probably a sex hormone, excreted in the urine of the normal individuals which is not present in the hemophiliacs and the transmitters.

Since Dr. Birch's first publication ovarian therapy has been tried by several workers. Doctors Foord and Dysart⁴, report a case of an actively bleeding hemophiliac following tonsillectomy in which various coagulants were used and a blood transfusion given with no permanent results. After an injection of an ovarian extract the hemorrhage stopped in five minutes. Doctors Kimm and Van Allen⁵, report a case which was successfully treated with ovarian extract. Recently, I have had two cases† of hemophilia in which ovarian therapy was used, the results of which I would like to report. The first case may be classified as a mild grade of hemophilia, the other as a severe grade.

CASE No. 1: S. L., a young male about six and a half years of age, of Italian extraction, was brought to me in July, 1932, with a chief complaint of bleeding from the right side of the nose. The patient stated that in the early part of the morning he had scratched the inside of his nose with his finger and since then his nose had bled continuously, the hemorrhage being exaggerated on coughing, laughing or sitting up. The previous day he had suffered a fall, which the parents thought accounted for purpuric spots distributed

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

†Two other cases are now under observation and will be reported later.

over his body. For the past 12 to 24 hours his gums had been bleeding moderately.

On physical examination the child was found to be under-nourished and the skin and mucous membranes presented evidence of marked anemia. There was an abrasion of the inferior anterior angle of the right side of the nose, which was bleeding slightly but continuously. Many carious teeth were present with slight continuous bleeding from the gums, which was increased when eating. There were many purpuric spots present varying from the size of a quarter to that of a silver dollar. These purpuric areas were distributed more or less symmetrically on the elbows, buttocks, knees and ankles. Otherwise physical examination was negative.

A history of "bleeders" in the family could not be obtained. The patient had only had one previous hemorrhage which occurred at the age of five, following an extraction of two deciduous teeth. At this time he bled continuously for three days. Various coagulants were used but with no effect, the hemorrhage apparently ceasing spontaneously.

The blood findings were as follows: hemoglobin, 54%; erythrocytes, 3,850,000; platelets, 200,000; coagulation time (Lee and White), 30 minutes; prothrombin time (Howell's), 1 hour and 40 minutes; bleeding time, normal; clot retraction, normal.

Treatment: 1 cc. of ovarian extract (Lilly & Co. No. 177) was given subcutaneous daily for a period of 12 days. Twenty-four hours after beginning treatment the bleeding had decreased considerably, and by the following day, or 48 hours after, the bleeding had ceased entirely. At the end of treatment another blood analysis was reported as follows: hemoglobin, 47%; erythrocytes, 3,300,000; coagulation time (Lee and White), 7 minutes; prothrombin time (Howell's), 16 minutes. At the suggestion of Dr. Birch, he was put on ovarian substance by mouth, taking 15 grains in divided doses daily. Another analysis on October 22 showed a coagulation time of 8 minutes and a prothrombin time of 5 minutes.

Treatment was then discontinued and blood analyses at irregular intervals have shown the blood to be within the normal zone. The hemoglobin and the red blood count have approached the normal limits. The patient has also shown an increase in weight and vitality. He has been free of hemorrhages even though one of his deciduous teeth was extracted a few months ago.

CASE No. 2: L. W., a known hemophiliac, 21 years of age, came to me October 8, 1932, with a severe hematuria. Since the age of 2, at which time his condition was diagnosed, he had been a victim of frequent attacks of hemorrhage, either spontaneously or following trauma. In recent years, the patient had noted that hemorrhage would occur every six or seven weeks, and many times had been able to almost predict the time of the next hemorrhage. At the age of nine the right knee became ankylosed following an intra-articular hemorrhage. At the age of eleven he began to suffer with frequent attacks of hematuria. These attacks of hematuria had been slight and of short duration until April, 1932, when the hemorrhage was more severe and lasted for about four weeks. On September 16, 1932, he had another severe attack of hematuria. At first 2 cc. of thromboplastin was given daily with no effect. On the sixth day of the hemorrhage five grains of an ovarian extract was given daily for a period of three days, and on discontinuing the drug, although no improvement had been noticed, the hemorrhage became worse. A few days later he was again placed on ovarian extract, given five grains every six hours and after a week was given five grains every twelve hours. These injections were given intramuscularly producing subcutaneous hemorrhages which caused much discomfort to the patient. I was called to see the patient on October 8, 1932, at which time the urine was port wine in color.

Physical examination revealed a very anemic young male, about 21 years of age. Both arms presented purpuric areas covering almost the whole arm. There was an ankylosis of the right knee joint, otherwise the examination was negative.

The family history of the patient is interesting. His mother's brother and three brothers of his grandmother on the maternal side had hemophilia.

Treatment: The patient was immediately (October 8, 1932) placed on 1 ampule of ovarian extract (Lilly's No. 177) every six hours. On the 10th of October blood findings were as follows: coagulation time (Lee & White), 2 hours and 35 minutes; prothrombin time (Howell's), 4 hours; hemoglobin, 38%; red blood count, 3,080,000; platelet count, 400,000; clot retraction, normal; bleeding time, normal. After forty-eight hours of treatment the urine began to clear so that by October 14, there was no macroscopic blood. On October 15 another blood analysis was made, the

results being: coagulation time (Lee & White), 2 hours and 3 minutes; prothrombin time, 36 minutes. The urine showed ten red blood cells per high power field.

The same treatment as outlined above was continued until Oct. 22, when a blood analysis was reported as follows: coagulation time (Lee and White), 7 minutes; prothrombin time, 25 minutes.

The dose of ovarian extract has been increased gradually so that now the patient takes 31 grains three times a day. The blood findings have not remained within normal limits, the prothrombin time ranging between 21 minutes to 1 hour and 41 minutes. Through the courtesy of Drs. Spengler and Mills, of Tampa, I have been able to obtain some old records of this patient dating back to 1924, since which time the prothrombin time during this past period had ranged between 37 minutes as its lowest level and 4 hours as its highest, most frequently ranging between one and four hours. This indicates a definite improvement, since the coagulation time has never reached the high levels prior to treatment. However, the patient has been free of hemorrhages with the exception of a small subcutaneous hemorrhage of the hand last November. It has been Dr. Birch's experience that hemorrhage seldom occurs when the prothrombin time is less than 1 hour and I think we can safely predict that this patient will remain hemorrhage-free as long as we can keep the coagulation time under 60 minutes. The patient has gained 15 pounds and the hemoglobin and red blood count have reached the normal limits.

The treatment of hemophilia with ovarian extract is in its infancy. We seem to have in our possession a product of great value in alleviating the disease. Dr. Birch has tried various endocrine preparations, such as testicular mammary, anterior pituitary extract, etc., but her best results have been obtained by the use of whole ovarian preparations. However, we must not be misled in believing that the ovaries are the only glands producing this hormone, which plays a part in the coagulating mechanism of the blood, an obvious reason being that women who have undergone a bilateral oophorectomy do not show any tendency to hemorrhage. Then, no doubt, there must be some other endocrine gland or glands in the organism which secrete a similar hormone. Since there is a close relationship between the pituitary gland and the ovaries it would be logical to think that this gland may play a part of great

importance in this coagulatory mechanism. In the male, the testis may be one of the glands producing the hormone; however, this is open for investigation and it is my opinion that testicular extracts in very large doses is worthy of trial.

What is the "modus operandi" of this hormone? Does this hormone cause the blood platelets to be disintegrated so that cephalin can be liberated? We can only base our answers on hypothesis. Dr. Birch has shown, *in vitro*, that the addition of ovarian substance in hemophilic blood lowered the coagulation time considerably. Coupling this with clinical results, it seems plausible to deduct such a hypothesis.

Up to the present hemophilia has been classified as a blood dyscrasia. Since the condition seems to be alleviated by endocrine preparations, then it would be logical to think of hemophilia in terms of glandular deficiency or disarrangement, with marked hereditary tendency.

CONCLUSION

(1) It seems to be definitely proven, through the excellent work of Dr. Carroll Birch, that a decided advancement has been made in the treatment of hemophilia.

(2) It would appear that hemophilia is definitely a disease of glandular deficiency or disarrangement, especially, of those glands producing sex hormone.

(3) Ovarian therapy seems to be specific in its action and will afford relief from symptoms as long as sufficient quantities are administered to make up for the sex hormone deficiency in the hemophiliac.

(4) The thought is also brought to my attention that perhaps through the excellent results obtained by the use of ovarian extract in hemophilia, that the same hormone may prove of definite value in the treatment of the disease usually spoken of as Hemorrhagic Disease of the New Born.

SUMMARY

(1) Two cases of hemophilia are reported in which ovarian therapy was used, with very satisfactory results.

(2) The suggestion is made that hemophilia be reclassified under Disease of Glandular Dysfunction.

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DISCUSSION

Dr. Herbert R. Mills, Tampa:

I wish to congratulate Dr. Spoto on the careful and thorough manner in which he has prepared this paper, and also upon the fact that he has seen four cases of hemophilia. The renewed interest in hemophilia has shown that although it is an uncommon disease, it is not quite as rare a malady as was formerly supposed. During twenty-three years of medical practice in Tampa, I had seen one case of hemophilia up until 1932, but since Dr. Spoto's attention to the subject in the past year, we have seen three additional cases, making four in all. The finding of these new cases is not only due to the fact that we are watching for the condition more intently, but because of the proper laboratory procedures employed in the diagnosis. At least two of these cases had already been overlooked on account of inadequate methods of determining the blood coagulation time. The pathognomonic laboratory finding in hemophilia is marked prolongation of the coagulation time.

Many diseases and conditions will show a moderate increase in the coagulation time, and in the order named, such as: purpura hemorrhagic, leukemia, jaundice, anemia, certain infections and sometimes goitre; but with the possible exception of some cases of melena neonatorum, the coagulation time of the blood is markedly prolonged only in hemophilia, in which it is usually from five to twenty-five times normal. In Dr. Spoto's last case, however, the prothrombin time was only twenty-seven minutes, or two and a half times normal, but I never have seen as delayed a coagulation time in any of the other conditions mentioned above.

Clinically, the disease which we are most frequently called upon to differentiate from hemophilia is purpura, both primary thrombocytopenic purpura, and the secondary purpuras. The blood findings in the two conditions are strikingly different. In hemophilia the coagulation time is markedly prolonged; in purpura normal or only slightly delayed. In hemophilia the bleeding time is normal; in purpura prolonged. In hemophilia the platelets are normal in number. In purpura they are markedly reduced. In hemophilia the clot after it finally forms is normally

retractile. In purpura the clot is soft and does not retract.

The normal bleeding time in hemophilia is the reason that no coagulation time test is of any diagnostic value unless the blood is taken from the vein. All of our hemophiliacs show normal clotting time from the finger, by the usual puncture methods, although the coagulation time on venous blood, taken at the same time, required as long as four hours to clot.

For many years I have been relying on the Lee & White method of coagulation time on venous blood, but during the past year, since I have been working with these four hemophiliacs, I have learned that the prothrombin time method of Howell is the most reliable and exact of all the coagulation time methods, and have adopted it as a routine.

It can not be too strongly urged that all coagulation time tests, no matter for what purpose—diagnostic or preliminary to operation, especially on male children—should be done on vein blood, and preferably by Howell's prothrombin method. It would be better to make no test at all than to make a coagulation time test by finger puncture.

Dr. Mary Freeman, Perrine:

I would like to ask Dr. Spoto if he suggests this as a help when we get a patient on the table that bleeds too much. I had a negro a couple of years ago that bled excessively from small wounds, and it was a long time before we were able to check the bleeding. Would this ovarian extract be advisable there?

I have used with two different babies blood from the mother's vein in the baby's back to stop the bleeding. That has been very successful. But I was afraid to put any other person's blood into a patient with no method of testing it. But if I could use extract it would be a help in doing work in the woods.

Dr. T. Z. Cason, Jacksonville:

Dr. Spoto has presented a very able paper, a fine thought, at this meeting and I certainly enjoyed it.

The science of genetics has not yet progressed far enough; we can draw but few conclusions regarding those diseases which are inherited. It certainly has not progressed far enough to warrant any legislation requiring sterility even in mental diseases.

This particular disease probably comes under Massey's law of inheritance. We have learned

that this hypothesis is not applicable to human beings as it has been demonstrated in lower animals; but we do know that this disease is recessive in character and probably complies with Massey's law, and that we, by advising our patients, can go far toward stopping the furtherance of this disease. I think when we find that this disease is in the family we should be very frank with the parents and try to keep them from having children and bringing this disease further into the human race.

Until the etiology is definitely known, and then I think it will not be of any value, the only way we can help is by this method.

Dr. Joseph S. Spoto, Tampa (concluding):

Again I wish to emphasize the importance of doing the coagulation time by Howell's method. Dr. Mills and I feel that it is the best method available, and we think that many cases of hemophilia are undiagnosed due to the use of the more common coagulation tests, such as capillary and crystal methods.

Recently I had a communication from Dr. Birch in which she agrees with me in that hemophilia should be reclassified as a glandular dysfunction. She is now preparing a paper which brings this thought out more forcefully.

Answering Dr. Freeman: I feel confident that if the bleeder is a hemophiliac the hemorrhage will be stopped by ovarian therapy; however, we must bear in mind that all bleeders are not hemophiliacs. In the phase of active bleeding I would advise large doses at frequent intervals.

I don't want to leave the impression that we have a cure for hemophilia, but we have at our disposal one means of controlling hemorrhage in the hemophiliac which seems to be more effective than our past methods.

We now have two other cases, four in all, under observation, and our results have been very satisfactory.

I wish to thank you for the generous discussion of my paper.

ARE THE SEED OF THE TUNG OIL TREE POISONOUS WHEN EATEN BY MAN OR ANIMAL?*

HENRY E. PALMER, M.D.,
Tallahassee.

The tung oil tree, *aleurites fordii*, is indigenous to China. To Dr. David Fairchild, of the U. S.

Department of Agriculture, belongs the credit of introducing this most useful tree into the United States about the year 1905.

The first seeds were planted in Chico, Calif. The young trees from these seeds were distributed in 1906 to Alabama, Florida, Louisiana, and Mississippi. One of these trees was planted on the Raines' farm near Tallahassee, Fla., and was the only tree that lived. It is still living, surrounded by a neat iron fence, erected by the U. S. Government to preserve it from trespassers, and roaming stock. It was from the seed of this tree that the first tung oil was extracted in America.

Tung oil, also called wood oil, or China wood oil, is that extracted from the seed of the tung oil tree.

Tung oil has a wide variety of uses. In China it is extensively used to water-proof paper, cloth, and masonry, as well as varnish. In America it is used mainly in varnishes, being combined with rosin to form a combination that has entirely replaced the imported fossil gums. Further uses are the insulation of electrical equipment, as wires, cables and motors; the manufacture of linoleum, and oil cloth; leather dressings; sheet packing and gaskets; and automobile brake linings. Paint and varnish manufacturers use the oil as a necessary ingredient in an extremely wide variety of their products, including lacquers, japans, enamels, fillers, hardeners, insulating and impregnating compounds, finishers, sizings, and numerous others. The planting of tung oil trees in Florida is becoming an important industry. The acreage extends from Polk to Escambia counties, the larger acreage being in Alachua, Levy, Clay, Lake and Okaloosa counties.

However, we medical men are not so much interested in the commercial side of this industry but, as the title of my paper indicates, in the effects of the nuts when accidentally, or intentionally, eaten by man.

The unhulled seed of the tung tree resembles an unshelled hickory nut, and when hulled, it looks like a chestnut. Hence children and adults, not familiar with the untoward consequences when eaten, partake of them with most distressing results.

In a short time after eating the seed, there is a feeling of discomfort, warmth, and nausea, followed by vomiting and pain. Depending on the number of seeds eaten, there will be great pain, vomiting, and purging, with cold clammy skin,

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

prostration, gripings, delirium, weak rapid pulse, and perhaps death. The quick emetic effect of the poison on the gastric mucosa no doubt accounts for the absence of fatal termination. The symptoms of poisoning are similar to those caused by an over-dose of croton oil. Upon further investigation I found that the tung oil and croton trees belong to the same species. Croton oil when swallowed is decomposed in the intestines into glycerin, and crotonolic acid. The latter is irritating, and poisonous. It is supposed that a similar change occurs in the tung seed when ingested, producing the acute gastro-enteric symptoms.

A complete chemical analysis of the seed has not been made to date. I have written to various sources for information and will read extracts from a few of the replies. A letter from the Public Health Service Department, Washington, D. C., brought the following information: "A search of available medical literature fails to reveal any articles on tung oil seed poisoning. The only statement we find on this is in the U. S. Dispensatory, 20th edition, page 1515; it (tung-oil) has been used in ulcerations, and skin diseases. The seeds of the tung tree are used in China for killing rats, and are also affirmed to have emetic properties."

"Two negro men employed in hulling the nuts, used pocket knives. They also used the same knives to cut their chewing tobacco. About noon or thereabouts both had to be hauled home suffering with nausea, vomiting, violent abdominal pains, and purging."

"In the fall of 1924, I ate about one and a half of the meats of tung oil nuts. In about an hour I had an urgent nature call. Normally my stool is not very loose. This time I was in the toilet perhaps a half hour and I think I was clean through. I had griping pains in anus and abdomen."

"I understand there was a case in Tampa where a Northern man and his wife bought a place having a tung tree in the yard. She made a salad, using the nuts. About half hour after the meal, her husband went upstairs to the toilet, and she did the same downstairs. He yelled to his wife to call the doctor; in the meantime she had fainted."

"From the reports that we have had, it appears to act something like croton oil and it may be that it contains a constituent similar to that of croton

oil and which is responsible for the alarming symptoms."

The only data that has come to my attention in regard to physiological effects of tung oil is the abstract of Circular 270, Paint Manufacturers Association of the U. S., which abstract appeared in Chemical Abstract 20, 2370, (1926). According to this report, which is based upon experiments with rabbits and dogs, tung oil has only mild cathartic effects in relatively large doses. No irritating effect was produced on the intestinal mucosa. I am very much inclined to believe that the substance or substances having a pronounced physiological action are either absent from the oil or present in only small quantities. This can be demonstrated quite easily by experiments with the oil and with the press cake, but as far as I know, there have been no experiments of this kind reported. The composition of tung oil is reported as 90 to 95% of the glyceride of eleostearic acid and 5% of the glyceride of oleic acid. The eleostearic acid has a formula: $\text{CH}_3-(\text{CH}_2)_3-\text{CH}=\text{CH}-\text{CH}=\text{CH}-(\text{CH}_2)_9-\text{COOH}$.

I have treated several cases of poisoning in children from eating tung seed, and know of as many more in my town. Treatment should conform to that for any acute gastro-enteric irritation—morphine for pain; paregoric and bismuth for loose bowels; rest in bed; no food for several hours.

My purpose in writing this article is to put the medical profession on notice of the danger of eating tung seed.

DISCUSSION

Dr. T. M. Rivers, Kissimmee:

It is to be regretted that we know so little of the physiological action of this tung oil nut since it is becoming of such great importance commercially in the State of Florida, and we are especially indebted to Dr. Palmer for his timely paper on this subject. However, I cannot quite agree with Dr. Palmer as to the toxic agent in the tung oil nut.

We have had very little opportunity to know much about this tung oil nut, but we may by a sort of theoretical analysis and comparison reach some conclusion about it. The tung oil nut comprises four parts which are the capsule, or covering, cotyledon, plumule and radicle. The covering is more or less dry and inert, and could hardly contain the toxic property, since it is hardly ever eaten. The plumule and radicle are

very small, and would have to contain very highly toxic properties if they do contain the poison. The cotyledons are large and supply the nourishment to maintain the life and growth of the new plant until the plant can maintain itself. These cotyledons comprise the nourishing properties for the new plant, which are carbohydrates, hydrocarbons, proteins, minerals, and perhaps some vitamins and enzymes. The carbohydrates comprise sugars, starches and cellulose which are ordinarily non-toxic and would hardly have the toxic effect described by our author. The hydrocarbons make up the oil that is expressed from the nut and is the oil of commerce for which the tree is grown. This oil is used for many things and we have no evidence that it is highly toxic, the Doctor having shown that the oil is only mildly toxic at most.

There is another point about the oil which might be brought out and that is that the paints and varnishes that are used by thousands of people frequently produce allergic symptoms. Probably this oil is one of the allergens which might cause the intestinal symptoms described, but it would hardly produce the gastric symptoms since an allergen is ordinarily astringent or augmentary to the cardiac orifice and it is inhibitory to the pyloric orifice which would cause the contents of the stomach to be passed on into the intestines rather than be regurgitated by vomiting. You would hardly get vomiting symptoms from an allergen.

Passing on to the proteins. We have no evidence itself as to the tung oil bean, but by comparison we know that we give a child a very large dose of castor oil with no untoward symptoms other than perhaps some severe griping, but let the child eat two or three of the castor beans from which the oil is expressed and we will have a very dangerously sick child presenting the same symptoms that we get from the tung oil bean. Now, in the case of the castor bean this toxin is produced by the protein ricin. And my opinion checks down to this—that the poison in the tung oil must be similar to the protein ricin of the castor bean.

Dr. J. L. Kirby-Smith, Jacksonville:

A few years ago my brother was business manager of a large tung oil plantation at Morriston, Levy County. On occasion of a visit a man who worked around the tung oil trees was shown me, with an acute dermatitis of his arms and other exposed parts that had the appearance of

an ivy poison. It was my impression that this irritation may have developed from contact with the leaves of the tung oil tree. No patch tests were made to ascertain the exact source of the irritation, but the impression given is that the tung leaves, under certain circumstances, produce a dermatitis. This plant, the tung oil tree, has been imported from China and has been grown quite extensively in Florida. I cannot conceive of anyone eating the nuts. They are not considered edible and no doubt are somewhat poisonous to some individuals.

Several years ago a number of unusual cases of dermatitis were reported from contact with the tile of the Chinese game known as Mah Jong. The lacquer on these tile was made from a tree in China very much similar to our Rhus tree, which as you know is called poison shumack. I wonder if this plant, the tung oil tree, is related in any way to the Rhus family.

Dr. Eugene G. Peek, Ocala:

I had a similar experience to that of Dr. Palmer. I had the misfortune to have three cases at one time in the same family. They did not know that there was such a thing as a tung oil nut on the place. There were three boys, 10, 14, and 18 years of age. After working all night we knew that the children were desperately poisoned from some substance, and on making an inquiry I found where they had been the afternoon before and on searching the barn found this sack of nuts. Up to that time I had never seen a tung oil nut. On further investigation I found that was what these boys had eaten.

The 18-year-old boy was sickest, probably because he had eaten the most nuts. The younger child, however, had two convulsions during the night and severe pains in the intestinal tract.

I enjoyed hearing this paper very much.

Dr. H. E. Palmer, Tallahassee (concluding):

Dr. Rivers has made a thorough and extensive examination into the chemistry of the nuts, and I thank him for his interesting report. It is a valuable contribution to the chemical properties, but does not help us much as to their poisonous properties. I am dealing with facts, and results. When eaten they produce violent cramps, pains, etc.; therefore, are poisonous. My purpose in presenting this paper is to put the medical profession on notice that the nuts when eaten are very harmful, and under some conditions might prove fatal.

THE PLASTIC OPERATION FOR THE CURE OF URETHRAL STRICTURE— A FURTHER REPORT.*

MAXIMILIAN STERN, M.D., F.A.C.S.,
DeLand.

It is generally conceded that palliative measures can never arrest the progress of urethral stricture and that when infection and traumatism eventually ensue, operative intervention becomes imperative. It is also conceded that external urethrotomy, the operation generally employed, is only an emergency measure and contains no promise of cure.

In view of these facts I have endeavored to devise a means for the radical cure of stricture at the bulb by means of a plastic operation providing a perfect exposure of the diseased area for its resection, without inflicting injury to the overlying structures whereby later cicatrization might result in recurrence.

These requisites have not heretofore been met in the operation of Marion, Russell or Cabot in that they are complicated by the fact that the highly vascular corpus spongiosum is transversed by the incision: bleeding obscures the field and clean isolation of the urethra becomes impossible.

In these operations, like in external urethrotomy, the corpus spongiosum is injured and it is regularly observed that increased cicatrization follows. The stricture is thus aggravated rather than benefited.

Text books on anatomy teach us that the corpus spongiosum surrounds the urethra. This is true in the pendulous portion only but not so at the bulb—here it is found only posterior to the urethra.

Upon this fact and also that the bulbous end of the corpus spongiosum could be separated cleanly from the urethra, rests the rationale of the operation which I am about to describe.

It is exactly in this part of the urethra that stricture occurs most frequently and it is fortunate that the overlying structures can be separated from it in a surgical approach. Figure 1 gives a diagrammatic representation of stricture at the bulbo-membranous junction with a staff in the urethra arrested at the stricture, through which a filiform is passed into the bladder.

The bulb of the corpus spongiosum is seen attached to the triangular ligament and overlying

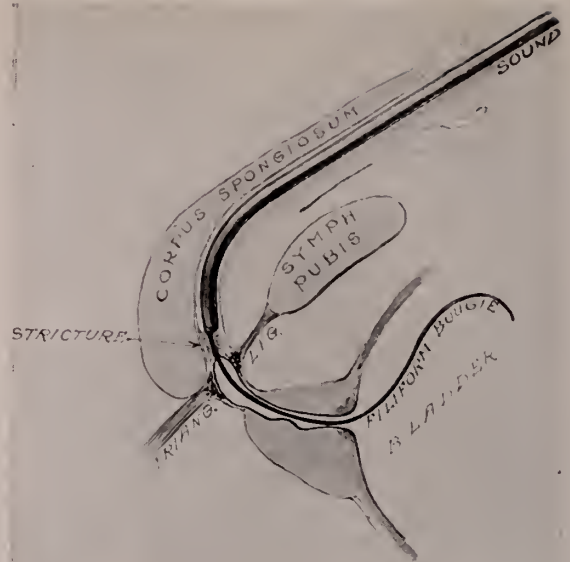


FIGURE 1. Diagrammatic representation of stricture at bulbo-membranous junction. Staff in urethra arrested at stricture. Filiform through stricture into bladder. Note corpus spongiosum overlying stricture and attached to superficial layer of the Triangular Ligament. Courtesy, Journal A. M. A. Maximilian Stern.

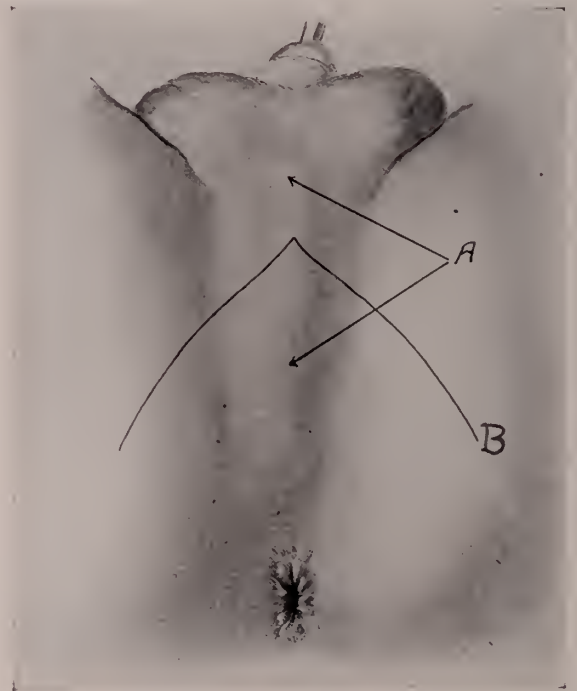


FIGURE 2. A—Bulging caused by staff in urethra, the lower arrow corresponding to beak of staff at stricture. B—Inverted V incision. Its apex well above stricture. Courtesy, Journal A. M. A. Maximilian Stern.

the strictured urethra. By freeing and elevating this stricture the stricture is brought into view and can thus be dealt with in a clear field.

*Read before the Pinellas County Medical Society February 3rd, 1933.

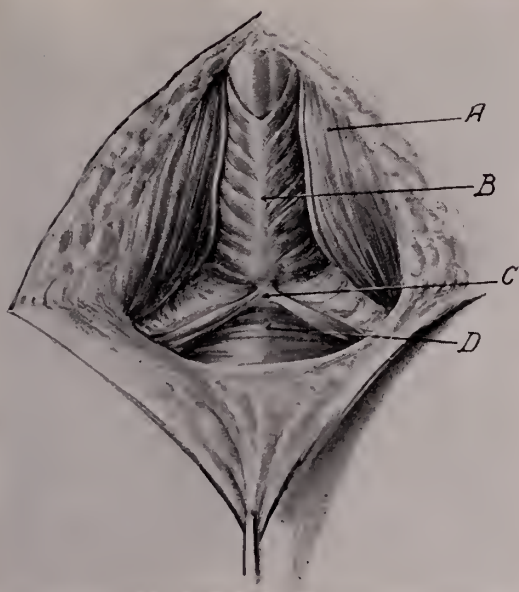


FIGURE 3. Skin flap turned down exposing structures overlying corpus spongiosum. A—Ischio—Cavernosus muscle. B—Bulbo-cavernosus muscle. (C—Junction of the superficial transversus peronei and bulbo-cavernosus muscles on corpus spongiosum. D—Levator ani muscle. Courtesy, Journal A. M. A. Maximilian Stern.

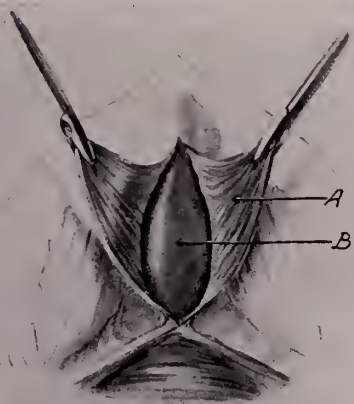


FIGURE 4. A—Bulbo-cavernosus muscles separated and held apart permitting corpus spongiosum (B) to protrude. Courtesy, Journal A. M. A. Maximilian Stern.

THE OPERATION

The patient is placed in an exaggerated lithotomy position in order to bring the perineum to a slightly higher plane than a vertical one. An in-

verted V incision is made, the apex of which corresponds to a point about an inch above the position of the beak of the staff in the urethra. its lower arms extending nearly to the tubercles (Fig. 2). The skin flap is dissected carefully, so as not to injure the thin muscle layers overlying the corpus spongiosum (Fig. 3).

At the apex of the denuded area, the bulbo-cavernosus muscles are separated from above downward in a median line carefully escaping the corpus spongiosum and exercising care not to puncture this structure (Fig. 4).

These muscles cleave easily from the corpus spongiosum, as far downward as the superficial transversus peronei muscles. At this point they are firmly fixed along with the latter to the corpus spongiosum. (Fig. 4.) A hemostat is placed so as to grasp the insertion of these two muscles on either side and an incision is made mesial to the hemostats, so leaving a muscle stump attached to the corpus spongiosum. (Fig. 5.) Two lateral spaces now appear beside the "butt-end" of the corpus spongiosum, into which the finger easily penetrates to the superficial layer of the triangular ligament and it will be observed that the corpus spongiosum is fixed to this structure. With the aid of scissors the elevation of the corpus spongiosum from the triangular ligament and from the urethra itself is easy of accomplishment. (Fig. 6.) This procedure is carried as far as may be necessary, exposing that portion of the urethra in which the staff is arrested and for a short distance above it. The strictured urethra is now exposed to view and the tip of the staff when pressed down causes the urethra below the point of engagement to pucker in advance of it.

Two allis clamps grasp the urethra, one above the strictured area and the other well below it. A linear incision in the mid-line is made between these two points, opening the strictured area. Allis clamps are attached to the free edges exposing the interior of the urethra, bringing into view the beak of the staff and the filiform (Fig. 7). These two lateral flaps are removed with scissors, leaving an ovoid fenestra in the urethra. A rubber catheter, size 22 F. is now inserted into the bladder and the filiform removed. The open end of the catheter is slipped over the beak of the staff, and withdrawn through the urethra (Fig. 8). Urethral repair is now to be made. It will be found that there is ample urethral tissue for the transverse repair without causing even slight tension (Fig 9).

REPLACEMENT IN THEIR NORMAL POSITIONS OF
ALL THE STRUCTURES OVERLYING THE
URETHRAL WOUND

1. The corpus spongiosum is attached to the superficial layer of triangular ligament by two sutures of fine catgut. (Fig. 10.)

2. A single suture is so placed (Fig. 10), as to bring the two bulbo-cavernosus muscles and transversus peronei muscles in apposition to the muscle stump remaining on the corpus spongiosum. This suture also includes the levator ani which frequently drops away when the transversus peronei muscles are severed.



FIGURE 5. A—Levator ani. B—Superficial layer of Triangular Ligament. C—Attachment of corpus spongiosum to Triangular Ligament. Courtesy, Journal A. M. A. Maximilian Stern.

When this suture is tied, the structures are restored to their original positions and the union of the bulbo-cavernosus muscles completes the muscular repair.

The skin flap is now replaced with interrupted silk or linen sutures. It will be observed that there are three distinct coverings over the urethral wound. Close apposition of these structures may be confidently expected in a week or ten days while the catheter remains in the urethra. After the expiration of this time no urinary leakage is to be expected and the patient is permitted to void normally. Fig. 11 shows diagrammatically a sagittal view of the finished operation.

The corpus spongiosum is restored to its posi-

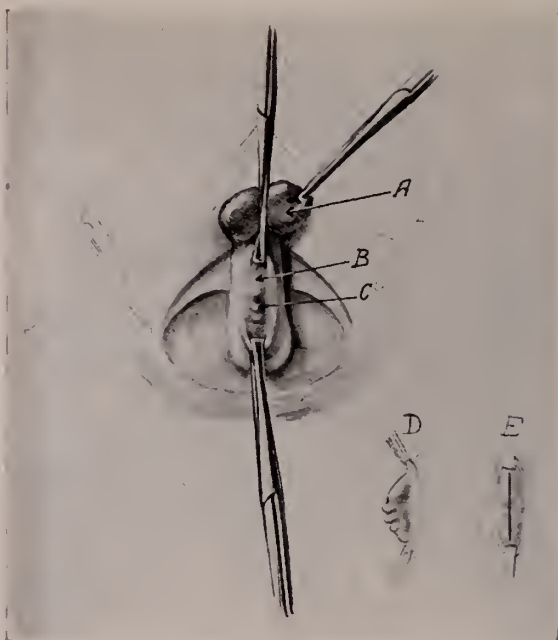


FIGURE 6. A—Corpus spongiosum elevated exposing urethra. B—Beak of staff engaged in stricture in urethra throwing it into folds C. D—Same, lateral view. E—Allis clamps placed above and below stricture and line of incision.

tion over the urethra and fixed by its extremity to the triangular ligament.

Pre-operative Preparation: Patients presenting themselves for this operation resemble very much our senile prostate patients in that continued urinary retention has reduced renal efficiency and the blood nitrogen is high. These



FIGURE 7. Urethra opened—Staff and filiform exposed. Left stricture bearing flap being removed. Courtesy, Journal A. M. A. Maximilian Stern.



FIGURE 8. Soft rubber catheter inserted into bladder. Open end of catheter slipped over beak of staff about to be drawn up through urethra. Courtesy, Journal A. M. A. Maximilian Stern.

patients are in a desperate state incident to the continued, vain endeavor to micturate through many anxious days and sleepless nights.

In this condition I soon learned that a preliminary cystostomy was of inestimable value. Rehabilitation of the patient made for a short convalescence. The cystostomy is also indicated for other valid reasons. The pathologic area is put at rest and can be treated as local conditions indicate.

A week or two of supra-public drainage gives time for the treatment of the urethritis and periurethritis which usually exist. In cases presenting perineal abscesses and urinary sinuses, incision and drainage are indicated.

An effort must be made to clear up all inflammation in the urethra and perineum before doing the operation, in order to obtain primary union.

Internal urethrotomy is necessary in many patients for stricture in the pendulous urethra, which is nearly always present. This should be done before introducing the indwelling catheter preparatory to suturing the urethra over it.

Complications: In several of my cases voluntary micturition was permitted too soon, allowing some urinary leakage into the tissues and causing abscess formation. These, however, gave no trouble after re-introducing the catheter for a few days.

In every case primary union of the flap occurred, even in those just cited where pus was evacuated through some point in the line of suture.

Epididymitis has occurred in about ten per cent of my stricture cases just as it does with prostatectomy. For the prevention of this complication vasectomy is distinctly indicated.

Post-Operative Care: The large catheter introduced at the time of operation is left in situ for as many days as possible before changing. Ordinarily four or five days will elapse before a purulent secretion is seen at the meatus and it becomes imperative to introduce a clean catheter.

In my earlier cases I permitted voluntary micturition at this time but I now believe that it is wiser to continue catheter drainage a week longer.

For the accomplishment of primary union I have employed an occlusive dressing recommended to me by Dr. Alexis Carrel. This consists of paraffin, wax and petrolatum which, when applied thickly to the wound, acts as an antiseptic in that it envelopes organisms and renders them inert.

In a moist bacteria laden area frequent changes of dressings must be made and perspiration avoided by the use of light bed clothes.

For the after care of these patients it will be found that sounds are not necessary. In cases, however, in which stricture of the pendulous urethra is present and in which internal urethrotomy is done, sounds should be passed once or twice a year.

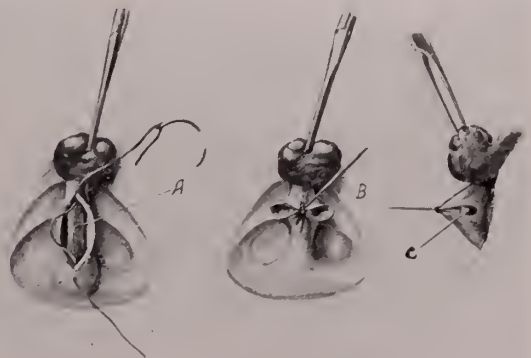


FIGURE 9. A—Catheter in urethra. First suture placed for approximation of upper and lower angle of wound. B—Suture tied. C—Lateral view showing ample amount of urethral tissue to permit of the horizontal repair. Courtesy Journal A. M. A. Maximilian Stern.

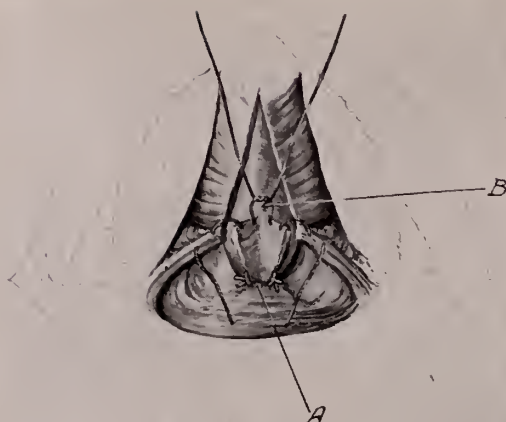


FIGURE 10. A—Corpus spongiosum replaced over urethral wound and sutured to superficial layer of Triangular Ligament. B—Single suture so placed as to restore all muscle structures to their original positions over "butt-end" of corpus spongiosum. Courtesy, Journal A. M. A. Maximilian Stern.

Results: I have now performed this operation upon eighty-six patients and in all cases have been highly gratified with the end results.

In my earlier reports the preliminary cystostomy operation was not recommended but I am

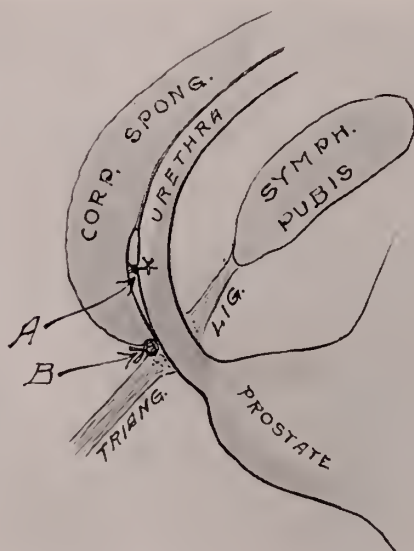


FIGURE 11. Diagrammatic representation of finished operation: A—Stricture excised and sutured in place. B—Corpus spongiosum replaced over urethra and sutured to Triangular Ligament. Courtesy, Journal A. M. A. Maximilian Stern.

now convinced that it is an essential step. This, as well as an improved post-operative technic, has shortened the hospital stay materially.

In my last two cases operated upon at the DeLand Memorial Hospital the perineal wounds were healed tight in two weeks. At this time supra-pubic drainage was discontinued and voluntary micturition permitted.

One of these patients was operated upon a year ago and has been in good health, voiding a good sized stream though he has had no treatment since. He now receives a No. 24 F sound with ease.

CONCLUSIONS

1. Stricture of the bulbous urethra has heretofore been impossible of clean surgical approach.
2. A stricture operation which is directed precisely to the diseased area and which does not inflict injury to any other structure, must be conceived as logical and superior to procedures heretofore employed.

PREVIOUS REPORTS

1. Four cases of Urethral Stricture with Acute Retention of Urine Treated Successfully without External Urethrotomy. *International Journal of Surgery*, 180 (June, 1919).
2. A Plastic Operation for the Cure of Urethral Stricture. *Journal A. M. A.*, January 10th, 1920.
3. Further Report of Author's Operation for Urethral Stricture. *American Journal of Surgery*, November, 1920.
4. A Complicated Case of Urethral Stricture. *Stern and Meltzer, Urologic and Cut Review*, August, 1921.

DOES QUININE AS USED IN THE INDUCTION OF LABOR INJURE THE EAR OF THE FETUS?*

H. MARSHALL TAYLOR, M.D.,
Jacksonville.

The subject in hand well illustrates the interdependence of the different branches of medicine and I am glad that I can discuss this topic with others than those interested primarily in otology.

For one to arrive at definite conclusions, whether quinine as used in the induction of labor has a deleterious effect on the ear of the fetus, it is necessary that the obstetrician, the histopathologist, and the otologist correlate their experiences and observations. It is my purpose at this time to ask for your cooperation in the study of this subject.

The type of deafness which we will discuss at this time is what is known as congenital deafness. Congenital deafness is the result of an anomaly or an arrest of function of some part of the auditory apparatus. The term congenital deafness

*Read before meeting of Staff of Riverside Hospital, Jacksonville, June 27, 1933.

means a diminution in the function of hearing but does not necessarily imply a total deafness, for there can be degrees of congenital as well as acquired deafness. Many of the congenitally deaf have various anatomical anomalies such as an atresia of the external auditory canal, an absence or anomalies of the middle ear and various anomalies of formations of the bony and membranous labyrinth. This group of cases is not included in our study, for we are interested in the etiology of the congenital deafness of those individuals who show none of these anomalies and give normal vestibular reactions to the whirling and caloric tests.

My interest in whether quinine as used in the induction of labor can have a deleterious effect on the ear of the fetus was aroused by the following case which I will report briefly. A multipara brought her four-year-old child to me with the following history. The child had previously been examined by various otologists, all making a diagnosis of a complete nerve deafness. After an extensive examination I concurred in this diagnosis. My examination showed a normal external ear; the drum membrane showed the usual light reflex, no retraction, no displacement of the umbo or malleus. The vestibular responses with the whirling and caloric tests were normal. The child's general physical appearance showed every evidence of health; all reflexes and gait normal. A negative Wassermann of the blood of the father, mother and the child was obtained and there was a negative history of any family deafness and consanguinity. The mother stated she had previously given birth to three perfectly healthy children, all normal labors. With the last child, after four hours of labor, her physician gave her castor oil followed by three ten-grain doses of quinine given an hour apart. Three hours later she was delivered of a six-pound boy. Half an hour after the second dose of quinine the mother stated that she complained of a severe headache, a roaring in her ears, an increasing deafness, a severe itching, and she described a breaking out on her face, chest and extremities of large purplish swellings, in other words, an urticaria. The mother stated that her deafness persisted for some six weeks; otherwise her convalescence was normal. Two years later when the mother learned that her baby was deaf, she became convinced that the thirty grains of quinine which she had taken and which had caused the roaring in her ears and her deafness also was the cause of the deafness of the child.

This novel history immediately interested me in this subject. In every case I have seen since of the congenitally deaf, I have endeavored to obtain the obstetrical history, to learn whether quinine had been given during labor. In two other cases of congenital deafness I have obtained somewhat similar histories though in neither of these cases did the mother give a history of idiosyncrasy for quinine as evinced by the urticaria.

The history also prompted a survey of the literature on the use of quinine in the induction of labor, with the idea of gaining some information as to the possibility of its having a deleterious effect on the ear of the fetus. Quinine was first used in the induction of labor in 1872, and there now seems to be a marked variation in the dosage. Gellhorn¹ gives ten grains every hour until thirty grains are given; Watson,² ten grains following castor oil. Many are now using ten grains by rectum. Recently the dosage of quinine has been somewhat reduced. This may be attributed to the realization that quinine may be a factor in fetal death for within the past seven years some eighteen fetal deaths have been attributed to the toxic effect of quinine administered during labor. Some of these deaths have been attributed to as little as ten grains; King³ and Gellhorn¹ reported fetal deaths which they attributed to ten grains of quinine. It is interesting to know that Dilling³⁻⁴ and Gemmell³⁻⁴ in their articles, "A Preliminary Investigation of Fetal Deaths Following Quinine Induction," and "Further Investigations of the Death of the Child Following Induction of Quinine," state that quinine is found in the urine of the fetus six to twelve hours after the last dose administered to the mother. They further state that the concentration of quinine which may be toxic to the fetal tissues may persist in the fetus many hours after the wave of secretion in the maternal urine has subsided and state that this is probably due to the slow return of the quinine from the fetus to the mother or to inability of the fetal kidneys to excrete such a concentration.

It is very interesting to observe that King³ in his report of a fetal death as a result of the administering of quinine to the mother states that he obtained from the brain of the fetus appreciable quantities of quinine as well as quinine in the urine of the fetus.

Kirby-Smith⁵ reports a case of quinine urticaria in the newborn that was attributed to quinine which was given the mother for the purpose of inducing labor. These reports would seem to indicate that the fetus in utero does in some cases

suffer from the toxic effect of quinine which is known as a protoplasmic poison.

THE EFFECT OF QUININE ON THE EAR

Politzer⁹ tells us that the "auditory nerve is more often affected than any of the other nerves of special sense by the action of drugs circulating in the blood." We know that quinine has a predilection for the auditory nerve and that subjective noises and deafness take place in from one to two hours after its ingestion. Politzer⁹ further says, "the predilection which quinine has for the auditory nerve causes the most severe pathological changes leading to a deafness of a varying degree and even to a permanent loss of the hearing function in one or both ears." Wittmaack¹⁰ reports marked changes in the ganglion cells of the ganglion spiralis in ears damaged by quinine and further states that these changes are analogous to those changes in the eye. While we are not positive as to what part of Corti's organ corresponds functionally to the layers of the rods and cones of the retina, it is nevertheless germane to our subject to study briefly the effect of quinine on the eye in the production of quinine amaurosis. In quinine poisoning of the eye there is first observed a marked pallor of the disc and a diminution of the blood vessels of the retina in number and size and narrowing of the fields of vision. DeSchweinitz⁷ states that the first effect of the toxic influence of quinine is to lessen the blood supply of the retina and optic nerve, and later, permanent optic nerve atrophy ensues. Ward Holden⁸ has demonstrated that the blindness is due to a degeneration of the ganglion cells and nerve fibers of the retina, followed by an ascending degeneration of the optic nerve. The ophthalmologist with the ophthalmoscope can observe the pallor of the nerve-head and the marked contraction of the retinal vessels and with perimetric examinations he can outline the contraction of the visual field and scotoma. The otologist has not such an advantage in studying the damage to the ear from quinine. The ocular examination is of little value and the source of information is from functional testing with the tuning fork, the Galton whistle, and the audiometer. For the above reasons the knowledge of the pathology of quinine deafness has been somewhat more limited than the knowledge of pathology of quinine amblyopia. It might be interesting for the ophthalmologist to study this subject to determine whether quinine in the fetal circulation could be a factor in congenital emblyopia. The cause of many of these cases has never been determined.

If Wittmaack's¹⁰ observation be correct, that the pathology of quinine poisoning of the ear is analogous to quinine poisoning of the eye, we may consider the following possibilities. The effect of quinine in contracting the muscle wall of the retinal blood vessels causing an ischemia of the disc, may be analogous to the contraction of the muscle wall of the ramus cochlearis and the vas spirale membranae basilaris causing an ischemia. The narrowing of the visual fields and scotoma may be analogous to the tone gaps or islands of deafness. We must consider these possibilities when we bear in mind the degeneration of the ganglion cells and nerve fibers of the organ of Corti and degeneration of the auditory nerve secondary to the powerful selective action which quinine has for the ear.

Since we have learned that quinine may produce certain toxic effects upon the fetus when used for the induction of labor, it is logical for us to surmise that in some instances the ear may be irreparably damaged. Neither is it difficult for us to surmise that this subject may give some light as to the etiology of some of our deaf cases in the young child which we have been unable to explain. I refer to those cases which have a negative family history and show nothing after examination further than a complete deafness or a partial deafness with tone gaps or islands of deafness. Definite study and animal experimentation is being undertaken for the purpose of substantiating this theory.

CONCLUSIONS

This subject seems to the writer to be of sufficient importance to justify the cooperation of the obstetrician, histopathologist and otologist in the study of its various phases.

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The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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HELIO THERAPY

The use of various types of lamps for artificial sunlight and ultraviolet radiation has grown so enormously during the past few years, that many lamps have been offered to the medical profession, and, unfortunately, also direct to the public, with confusing statements as to their values for various conditions.

At the same time, public interest has been aroused by press notices of the wonderful cures that have been effected, and by periodical radio talks.

As a matter of fact, the whole question is exceedingly complex, and the time has now arrived when the idea of exposing the body haphazard to any type of radiation to promote the general health or to treat various forms of disease must be discarded.

Much misleading information has been disseminated from various quarters, and the use of such terms as "ultraviolet", "visible spectrum", "infra-red" and so on, are no longer sufficient to indicate the particular rays which are used.

It is necessary to be very much more exact, and to use, instead of these names, the exact description of the wavelengths employed, and this can be easily done by making use of the international "Angstrom Unit."

This method of expression denotes accurately the position of any particular wavelength in the "electromagnetic spectrum" and also indicates to the user the particular characteristics of the wavelengths employed.

If one speaks of "ultraviolet" as a whole, it is impossible to ascribe the particular qualities as accurately as would be possible if the term "Angstrom Unit" were employed.

The shorter wavelengths in the "ultraviolet" region, lying above 2,500 A. U., are completely absorbed by the skin, and do not penetrate into the underlying tissues. It is by this rapid absorption that the energy in the wavelengths is translated into latent heat, which later manifests itself by the consequent erythema. It would be wrong to say that ultraviolet as a whole is absorbed by the skin; it is not, for as the waves increase in length, so they become more and more penetrative.

The addition of the longer wavelengths to the source of radiation has the effect of minimizing the irritant action of the shorter wavelengths so that a longer exposure may be given before the same degree of erythema is produced, and the

inclusion of wavelengths in the so-called "visible" spectrum has the effect of still further modifying the action of the "ultraviolet." Penetration and the bactericidal effects are increased, the irritant action is decreased, while the action is slower.

It will, therefore, be seen that the position in the spectrum of the grouping of wavelengths employed is important, and very considerable differences in effects can be obtained by varying the quantities of the wavelengths employed in the various parts of the spectrum.

Heliotherapy and its artificial substitutes cannot be compared beyond a certain point, and many fallacies—leading to serious errors in dosage and consequent poor results clinically—have followed when the rules applicable to the former have been slavishly followed in the latter.

Actinotherapy includes, not only luminous light and ultraviolet, but also the infra-red or heat rays. The infra-red rays, in the shape of radiant heat, have been used in a more or less empirical manner for many years, in the treatment of various disorders, but it is only during the last few years that they have been more carefully studied and scientifically applied.

The different wavelengths vary in their power of penetration. While ultraviolet rays possess practically no penetrative power, those of the visible or luminous spectrum have increasing powers of penetration as the red end is approached, and this penetrative power is increased as the infra-red region is explored. These infra-red rays have little or no bacterial power, and their biological and physiological effects are due to absorption. At the point where they are absorbed they produce heat, with consequent vasodilatation and hyperemia. This hyperemia of the surface of the body relieves congestion of the deeper parts, and acts as a sedative in painful conditions. The skin is stimulated, and its functions of elimination and excretion of waste products are increased, with benefit to the organism as a whole.

When the infra-red rays are absorbed they cause a slight rise in temperature of the body, not exceeding three-tenths to four-tenths of a degree, provided the heat mechanism is functioning efficiently. If this fails, heatstroke occurs. Infra-red radiation speeds up metabolism and the oxidation of the tissues is improved. A moderate increase in red blood corpuscles has been noted. Some observers state that the white corpuscles are decreased in numbers after irradi-

ation with infra-red rays, a fact which should be of value in treating leukemic conditions.

According to Steinnitz, the yellow and red visible radiations, and to a certain extent the infra-red rays, have an active effect on plant life. The infra-red rays exert a chemical action, destroying the chlorophyll in green plants, and altering the coloring matter of other vegetables (Le Bon). They therefore influence not only plants, but the animals and human beings that feed upon them, as their food value is correspondingly diminished. This effect is best seen in abnormally hot dry summers.

In using infra-red rays in heliotherapy colored glass filters are utilized to cut out the various undesirable wavelengths. Infra-red rays are absorbed by any black substance and emitted as heat. Red glass will filter out the infra-red in proportion to its density, spectral characteristics and thickness. Blue glass will allow passage of the green, blue and violet of the visible spectrum and a large percentage of the ultraviolet. Yellow glass will cut out the blue violet and ultraviolet passing yellow, orange and red of the visible waves and a large amount of the invisible red.

In actinotherapy with ultraviolet light one finds that one can obtain results without any demonstrable pigmentation. The natural reparative powers of the body are stimulated to respond *in suitable cases*, by exposure to artificial sources of ultraviolet light of the proper wavelengths, before the pigmentation response has time to be established.

The ultraviolet rays excite chemical changes in the epidermal cells, producing a stimulation which results in erythema. Too large doses lead to excessive chemical changes, and may produce a burn.

This burn is caused by the shorter wavelengths, and is a sign of lethal effect upon certain cells. (It is deliberately provoked when local areas of skin disease, as in lupus, are desired to be destroyed.) It is followed by necrosis and disintegration. If such an excess dose were given to a large area of the body, serious, and probably fatal, results might follow, owing to the setting loose into the blood-stream of broken down products in excess, which act as protoplasmic poisons.

Pigmentation in excess is found naturally in colored races. It is probably entirely protective, and, in effect, absorbs the heat rays more quickly than does the pale skin of the white man. Thus

we see that the negro begins to perspire at a lower temperature than does the Caucasian.

Further profound biochemical changes are set up as a result of the action of ultraviolet rays on the skin. It has recently been shown by work done at the National Institute of Medical Research that the cholesterol content of the skin is "activated", and, entering the blood-stream, exerts the curative effects in the treatment of rickets. Probably other—at present unknown—bodies are similarly produced, and may be regarded as vitamin-precursors, thus explaining the good results obtained from proper irradiation in deficiency diseases.

The skin, so far as the actinotherapist is concerned, is certainly the most important "organ" in the body. Since ultraviolet will not penetrate beyond the skin, all the curative results obtained are due to the skin-absorption, and absorption by the blood-stream circulating in the skin-capillaries.

The erythema is due to the dilatation of the capillary blood vessels of the skin. Thus the part irradiated is given an improved blood supply, which can be maintained by repeated dosage. At the same time, congestion of the deeper parts is relieved, and, by the dilatation of the capillaries, the local circulation is improved.

This erythema, which is a latent response, is produced by the action on the nerve-endings in the skin. The skin contains innumerable nerve-endings, both sensory, trophic, motor, and sympathetic. We must remember that the skin, and the whole of the central and peripheral nervous system, arise from the same primary layer of the blastoderm. Thus, the erythema is caused by a local-vasodilatation, an efferent response to an afferent stimulus.

Experiments have proven the action light has in increasing the natural bactericidal power of the blood, and shows the effect to be principally due to the ultraviolet rays.

The blood of a normal, healthy adult was taken and inseminated with pathogenic organisms, and examined microscopically. It was found, in a given time, that the activity of these bacteria was diminished or destroyed by phagocytic action. The experiment was repeated after the individual had been exposed to a source of ultraviolet rays, when it was found that this hemo-bactericidal power was greatly increased. Further experiments showed that *an over-exposure* to ultraviolet rays led to a diminution of the bactericidal effects. *The absolute importance of correct dosage*

is thus obvious if good results are to be obtained, and explains how it is that reports from different workers are contradictory. *Haphazard dosage is still rather the rule than the exception*, and many of the ill or poor results obtained clinically are due to faulty technique and dosage.

It is generally admitted by authoritative observers that ultraviolet and infra-red rays modify each other's effects on the living organism, according to their several proportions in combined radiations. An excess of heat rays will, for example, counteract the beneficial effects of ultraviolet. This partly explains the harmful effect of the tropical sun, when heat rays predominate in excess.

It is said that if an accidental overdose of ultraviolet rays has been given, a suitable dose of infra-red rays administered immediately afterwards will, to a large extent, counteract the adverse local or skin effects. But therapeutic doses must be given to obtain any result, that is to say, exposure of from half to one hour will be required. In smaller doses, the infra-red rays have no counteracting effect on the skin. If blistering has already occurred from the overdose of actinic rays, the heat rays will accelerate the healing processes, and new epithelium will be restored more rapidly. *The constitutional effects of ultraviolet are not, however, affected.*

NEW AND NON-OFFICIAL REMEDIES

A recent edition of "New and Non-Official Remedies—1933", containing descriptions of articles which stand accepted by the Council on Pharmacy and Chemistry of the American Association is just off the press.

The annual editions of this volume contain all that the busy physician needs to know concerning the newer preparations which he is daily importuned by the detail men of the pharmaceutical manufacturers to use. The remedies listed and described here have been examined and found acceptable by the Council on Pharmacy and Chemistry, the deliberative body charged by the American Medical Association with the performance of this service for the practitioner, who has not the time or means to make the determinations for himself. Among the new preparations admitted during the past year are: Trichlorethylene-Calco, an inhalation anesthetic proposed especially for use in trigeminal neuralgia; Nostal, an additional barbituric acid compound; Decholin

and Decholin Sodium, bile salt preparations for use in functional insufficiency of the liver, the sodium salt being suitable for intravenous use when necessary; Biliposol, Bismo-Cymol, and Iodobismitol, bismuth compounds for use in obtaining the systemic effects of bismuth, especially in syphilis; Triphal, a gold salt proposed for use in the treatment of lupus erythematosus; a number of improved liver preparations for use in the treatment of pernicious anemia; two halibut liver oil preparations of high vitamin A and vitamin D content; and Pentnucleotide, the sodium salts of the pentose nucleotides derived from the ribonucleic acid of yeast, proposed for use in infectious conditions accompanied by a leukopenia or neutropenia.

The book contains general articles, descriptive of the classification under which the various drugs are listed. According to the preface, more or less thorough-going revisions have been made of the articles: Arsenic Compounds; Dyes, Iodin Compounds; Liver and Stomach Preparations; Radium and Radium Salts and Silver Preparations.

This little book is a valuable part of any medical library. The cost is \$1.50 and it can be obtained from the American Medical Association, Chicago.

POST-GRADUATE MEDICAL COURSE

The Graduate Short Course for Doctors of Medicine in Florida, sponsored by the University of Florida Extension Division and the Florida Medical Association, was held at the University of Florida, Gainesville, June 19th-24th. The Committee in charge of the arrangements for the course was composed of Dr. T. Z. Cason, Jacksonville, chairman; Dr. G. C. Tillman, Gainesville; Dr. T. H. Bates, Lake City; and W. K. Mitchell, Gainesville. This Committee deserves a great deal of praise for the manner in which it handled the pioneer movement in medical education in Florida.

The effort of the Committee was to arrange the course for the benefit of the general practitioner and the avoidance of highly technical discourses was stressed. Over 100 doctors availed themselves of the opportunity of attending this course. The handling of the details of caring for those attending the course and the arrangement of the lectures were carefully supervised by the University authorities. The program was as follows:

MONDAY, JUNE 19

- 10:00 A.M. The Eye—Shaler Richardson, Jacksonville
 11:00 A.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 12:00 M. Relation Between the Chemical Constitution and the Physiological Action of Drugs—P. A. Foote, Gainesville.
 2:00 P.M. Dermatology—J. Lee Kirby-Smith, Jacksonville.
 3:00 P.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 4:00 P.M. Laboratory Technique (for the general practitioner) —Clayton E. Royce, Jacksonville, and L. Y. Dyrenforth, Jacksonville
 8:00 P.M. University of Florida Night. Addresses by John J. Tigert, Gerry R. Holden and Bert C. Riley.

TUESDAY, JUNE 20

- 10:00 A.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 11:00 A.M. Dermatology—J. Lee Kirby-Smith, Jacksonville
 12:00 M. Obstetrics—J. R. McCord, Atlanta, Ga.
 2:00 P.M. Surgery—Wm. Wayne Babcock, Philadelphia, Pa.
 3:00 P.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 4:00 P.M. Obstetrics—J. R. McCord, Atlanta, Ga.
 8:00 P.M. Program in charge of Alachua County Medical Society.

WEDNESDAY, JUNE 21

- 10:00 A.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 11:00 A.M. Ear, Nose and Throat—Cornelius G. Coakley, New York, N. Y.
 12:00 M. Obstetrics—J. R. McCord, Atlanta, Ga.
 2:00 P.M. Pediatrics—W. A. Mulherin, Augusta, Ga.
 3:00 P.M. Obstetrics—J. R. McCord, Atlanta, Ga.
 4:00 P.M. Surgery—Wm. Wayne Babcock, Philadelphia, Pa.
 8:00 P.M. An Evening with the College of Pharmacy—University Auditorium. Introductory Remarks, Townes R. Leigh, Gainesville. Recent Advances in Prescriptions and Dispensing, W. J. Husa, Gainesville. Modern Developments in Biologicals, B. V. Christensen, Gainesville. The U.S.P. and N.F. as Aids to the Physician, W. J. Husa, Gainesville.

THURSDAY, JUNE 22

- 10:00 A.M. Gynecology—C. Jeff Miller, New Orleans, La.
 11:00 A.M. Medicine—John A. Kolmer, Philadelphia, Pa.
 12:00 M. Ear, Nose and Throat—Cornelius G. Coakley, New York, N. Y.
 2:00 P.M. Surgery—Wm. Wayne Babcock, Philadelphia, Pa.
 3:00 P.M. Medicine—John A. Kolmer, Philadelphia, Pa.
 4:00 P.M. Laboratory Technique (Pathologist's Interpretation of Laboratory Findings)—Clayton E. Royce, Jacksonville and L. Y. Dyrenforth, Jacksonville.
 7:00 P.M. Reception by the University Women's Club—Plaza of the Americas, University Campus

FRIDAY, JUNE 23

- 10:00 A.M. Gynecology—C. Jeff Miller, New Orleans, La.
 11:00 A.M. Ear, Nose and Throat—Cornelius G. Coakley, New York, N. Y.
 12:00 M. Medicine—John A. Kolmer, Philadelphia, Pa.
 2:00 P.M. Surgery—Wm. Wayne Babcock, Philadelphia, Pa.
 3:00 P.M. Medicine—John A. Kolmer, Philadelphia, Pa.
 4:00 P.M. X-ray—J. C. Dickinson, Tampa
 8:00 P.M. Fred Albee, New York, N. Y.

SATURDAY, JUNE 24

- 10:00 A.M. X-ray—J. C. Dickinson, Tampa
 11:00 A.M. Medicine—John A. Kolmer, Philadelphia, Pa.
 12:00 M. Gynecology—C. Jeff Miller, New Orleans, La.
 2:00 P.M. Medicine—John A. Kolmer, Philadelphia, Pa.
 3:00 P.M. Surgery—Wm. Wayne Babcock, Philadelphia, Pa.
 4:00 P.M. Clinic—Wm. Wayne Babcock, Philadelphia, Pa.

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Rowlett, W. M.,
Tampa
Russell, R. E.,
Ocala
Shafer, W. W.,
Haines City
Sharpe, Wm. H. H.,
DeLand
Shaw, W. McL.,
Jacksonville
Smith, D. T.,
Gainesville
Snow, T. A.,
Gainesville
Steely, J. A.,
Punta Gorda
Strange, J. L.,
McIntosh
Summerlin, J. L.,
Gainesville
Summitt, R. E.,
Gainesville
Sutter, L. M.,
Orlando
Taylor, H. Marshall,
Jacksonville
Thomas, W. C.,
Gainesville
Thompson, D. C.,
Jacksonville
Tyler, L. V.,
South Jacksonville

Vandiviere, S. P.,
Raiford
Warren, G. H.,
Perry
Watt, H. F.,
Ocala
Westermann, J. T.,
Miami
Whitaker, C. D.,
Raiford
Williams, R. H.,
Eustis
Willis, J. M.,
Williston
Winchester, H. E.,
Dunedin
Wood, Alvin J.,
St. Petersburg
Wood, George,
Oxford
Young, W. C., Sr.,
Chiefland
Young, W. C., Jr.,
Canal Point

DOCTORS FROM OUT OF STATE

Babcock, Wm. Wayne,
Philadelphia, Pa.
Coakley, Cornelius G.,
New York City
Kolmer, John A.,
Philadelphia, Pa.,
McCord, J. R.,
Atlanta, Ga.
Mulherin, W. A.,
Augusta, Ga.
Witherspoon, J. T.,
New Orleans, La.

COMPLIMENTARY ADMISSIONS

Ambrose, Mr.,
Gainesville
Bates, T. H.,
Lake City
Boyd, W. C.,
Gainesville
Brown, Mrs. Harry
Gainesville
Cason, T. Z.,
Jacksonville
Dickinson, J. C.,
Tampa
Dorsey, Emily,
Gainesville
Dyrenforth, Lucien Y.,
Jacksonville
Hiner, L. D.,
Gainesville
Johnwick, Edgar,
Gainesville
King, Betty,
Miami
Kirby-Smith, J. Lee,
Jacksonville
Larrimore, Granville,
Gainesville
Royce, Clayton E.,
Jacksonville
Sanborn, N. W.,
Gainesville
Tillman, G. C.,
Gainesville
Thomas, John Henry,
Gainesville
Thomas, J. H. Y.,
Jacksonville

RADIO BROADCASTS, 1932-1933

The following broadcast was arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

LISTER AND THE DEVELOPMENT OF SURGERY*

J. RALSTON WELLS, M.D.,
Daytona Beach.

In viewing the history of medicine, there is no part of it more absorbing, more romantic, or more full of human striving and human achievement, than the subject of surgery.

As all other evolutionary parts of civilization, surgery has become more proficient and more exact as time goes on. We cannot say that there has been a particular advance at any exact date, but in reading medical history there are certain incidents that make profound impressions. It seems to me, looking from the light of today back to that of yesterday, we can divide this progress into several eras.

Let us call the first era that of Heroic Surgery. This dates back beyond 1500 B. C. The world was probably made up of savages. They knew practically nothing concerning anatomy or physiology. Common sense, then as now, at times affected a cure. We find in the Papyrus Ebers of ancient Egypt a history of Cesarean section, removal of stones from the bladder, and many formulas and surgical directions. Skulls have been found that had been operated upon, apparently with stone implements. History tells us that these openings were made in an attempt to cure epilepsy and other forms of brain trouble, believed at that time to be caused by devils. The openings were made in an effort to allow their escape. Amputations of arms, legs, fingers, etc., were also performed during these past ages. Anesthesia was obtained by the use of intoxicating wines and opium.

It was not until after the advent of printing in the 15th Century that books became more common. A second era was ushered in with the advent of the first great book on anatomy written and published by an Italian anatomist, Andreas Vesalius, (1513). Vesalius showed a comprehensive knowledge of the human anatomy, which was ably utilized by the practical surgeon, Pare,

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, January 8, 1933.

(1510-1590). Following this book, the description of the circulation of the blood by Harvey (1578-1658), and of the lymphatics by Aselli, (1581-1626), gave an impetus to surgery that John Hunter, (1728-1793) utilized to the fullest extent. It needed only a knowledge of infection, and a better method of anesthesia, to usher in a third era.

The third era is the beginning of modern surgery and may well be headed by the advent of the discovery that infection was due to micro-organisms, and their control. To the undying names of Pasteur, (1865), who discovered and described micro-organisms, and Lister (1867), who first described a method for their control, modern surgery owes its being. It only needed the addition of anesthesia to complete the basis upon which we have builded today. We owe the advent in the uses of ether to Long in 1843 and to Morton in 1846; chloroform, the composition of which was described by Dumas in 1835, was introduced by Simpson in 1849; and nitrous oxide by Priestly in 1774, used by Davy in 1780, and by Wells in 1844 but was really introduced into surgery by Bigelow in 1846. The field of local anesthesia must not be forgotten, Koller using cocaine in 1884 and the synthetic novocaine by Einhorn in 1905. During this era, surgery has progressed to such heights, and with such rapidity, and with so many remarkable discoveries, that it is impossible for an unbiased mind to do more than to cite the various high spots from then until today.

Before the advent of Lister, a pin prick of the finger many times spelled death; abdominal surgery was almost surely a fatal procedure, and any surgery was extremely hazardous, all because infection was known but uncontrollable. Lister proceeded upon the theory that infection came from the air, and he attempted to remedy this by carbolic acid sprays. Later he realized that the clothing, instruments, human hands, etc., were of more importance. Here again he employed carbolic acid. He met with many setbacks and disappointments but from his teachings and theories various other investigators were stimulated to work in similar fields.

Two great teachings arose; one, that of antiseptis, and the other that of asepsis. To digress a moment, let me explain: sepsis means pus, poisoning, etc.; antiseptis means *against* poison and pus—something that will kill or neutralize pus, poison or bacteria. Asepsis means *without* sepsis.

In other words, normal skin is septic. It can be made antiseptic by Lister's carbolic acid, or some other *antiseptic*. On the other hand, surgical instruments, dressings, etc., are sterilized by heat in one form or another and are made free of sepsis, or are made aseptic. Modern surgery utilizes the combination of both anti and asepsis, the one (anti) to combat septic infection when already established, and the other (aseptic) to prevent the establishment of sepsis. Our surgery today, as I have said, depends upon a combination of both of these principles. It is interesting to note that Lister's use of carbolic acid is considered today as the basic unit of antiseptis. One of the first uses of the Lister technique was in the Philadelphia General Hospital in 1882.

Surgery of the abdomen was probably first perfected by Von Billroth of Vienna; and Spencer, Wells, and Tait, in surgery of the ovaries, uterus and tubes. In about 1860, before Lister's technique, in statistics of 2000 cases of amputation, there showed a mortality in Edinburgh of 43%, in Glasgow 39%, in Paris 58.8%, in Pennsylvania Hospital 24.3%, Massachusetts General Hospital 26%, in military practice 75-90%. Such conditions made a sad calling for a surgeon and would not be tolerated today. So sharply divided was the line of the old and the new (pre-Lister and Lister), that the elder Gross (Samuel D. Gross) bitterly opposed his son, the younger Gross, in his practice of the Lister dressing and technique, telling the young man that bacteria and their control was new-fangled and surgical technique was of greater importance. Samuel Gross many times sharpened his surgical scalpel on his boots before an operation.

To Roentgen, a German physicist, in 1896, we owe the X or Roentgen ray. What paths of surgery did this event open up? Realms of the body hitherto unknown are from this event made plain. Suffering, pain, and untold errors are now, many times, things of the past. In this field many great discoveries have been made. By the use of the X-ray alone, positions of the bones are made plain. By the introduction of substances opaque to the X-ray into the stomach, intestines, gall-bladder, kidneys, spinal cord, etc., the X-ray can show health and disease and the various gradations between. The X-ray also is of great service in the cure of cancer.

I will conclude by mentioning in passing that MacWilliams first utilized adhesive plaster in the treatment of fractures; Marcy introduced anti-

septic ligatures for the radical cure of rupture; Fitz in 1886 first gave the name of appendicitis, and explained its causes and cure. Prior to this time this condition was variously termed "Diac passion," "acute indigestion," etc. W. W. Keen perfected much in the field of surgery of the brain and spinal cord. Corning (1885) first performed spinal anesthesia. The comparatively new discovery of radium by Madam Curé has been of untold value, and its uses are yet to be fully realized.

We can point with pride to the problems that have been solved, but we dare not fail to realize that there are still many which seem to baffle solution. I need but mention our ignorance of the cause of cancer which makes our treatment of that malignant disease still a matter of empiricism, early surgery, radium, and X-ray, but which of itself is enough to humble the proudest among us. Medicine and surgery owe a vast debt to Pasteur as a chemist, to Roentgen as a physicist, and to Lister, as a practical surgeon, the father of antiseptics.

Dr. John J. Abel once said: "Greater even than the greatest discovery is to keep open the way to future discoveries."

MINUTES OF THE FOURTEENTH ANNUAL MEETING OF THE FLORIDA RAILWAY SURGEONS' ASSOCIATION

The meeting opened with a luncheon at the Hollywood Beach Hotel at 12:15 p. m., May 1st, 1933. This was the Association's second luncheon opening and proved to be an interesting event. The luncheon was well attended and gave every appearance of an enjoyable event. The luncheon was open to any members of the Florida Medical Association who were present. New acquaintances were formed and informal discussions of the affairs of the association were freely indulged in. When the luncheon was over the members adjourned to the convention hall where the meeting proceeded.

The meeting was called to order by Dr. H. A. Walker, formerly local surgeon of the Florida East Coast Railway at Hollywood Beach but more recently of Miami Beach. The invocation was delivered by Rev. Thomas H. Sprague. Addresses of welcome were made by Mayor J. A. Lewis of Hollywood Beach and Dr. A. B. Connor, Ft. Lauderdale, chief surgeon Florida East

Coast Railway. The presidential address by Dr. G. C. Tillman was a strong and forceful paper. The real treat of the meeting was the oration by Dr. Frank K. Boland, chief of the department of surgery of Emory University, of Atlanta, Ga.

It is worthy of note that every member who had promised a paper for the program was present except one, Dr. A. E. Drexel, of Palatka, who was on his way but, through a misunderstanding of the schedule, had started late and arrived immediately after the meeting had closed.

This was by far the best meeting from every point of view the association has ever held. The increase in attendance and interest in the program which has been more and more evident for the past three years is indicative of the growing strength of the association.

At the business session many items were brought up for discussion but no matter of major importance was handled.

The election of officers for the ensuing year resulted as follows: President, Jack Halton, of Sarasota; President-elect, W. C. Page, of Cocoa; Vice-President, H. Gates, of Bradenton.

The following committees have been named for the ensuing year:

EXECUTIVE COMMITTEE

C. D. Christ, M.D., Orlando, Chairman;
J. W. Alsobrook, M.D., Plant City;
Herman Watson, M.D., Lakeland.

SCIENTIFIC PROGRAM COMMITTEE

W. C. Page, M.D., Cocoa, Chairman;
G. H. Edwards, M.D., Orlando;
W. A. Lancaster, M.D., Tampa.

LEGISLATIVE AND PUBLIC POLICY COMMITTEE

L. F. Carlton, M.D., Tampa, Chairman;
L. M. Anderson, M.D., Lake City;
Fred H. Albee, M.D., New York and Sarasota;
T. M. McDuffee, M.D., Manatee;
F. J. Waas, M.D., Jacksonville;
Wm. R. Warren, M.D., Key West.

NECROLOGY COMMITTEE

T. M. Rivers, M.D., Kissimmee, Chairman;
R. R. Duke, M.D., Tampa;
W. H. Grace, M.D., Fort Myers;
C. H. Kirkpatrick, M.D., Arcadia.

STATE NEWS ITEMS

Dr. Clayton Washburn of Jacksonville left the latter part of June for a two weeks' vacation trip. Dr. Washburn expected to go to New York City to visit clinics and then go to Susquehanna, Pa., to meet Mrs. Washburn and their two daughters.

* * *

Dr. Homer Pearson, Miami, president-elect of our Association, attended the Post-Graduate Medical Course at Gainesville the latter part of June and visited in Jacksonville, Daytona Beach and other cities on the east coast on his return trip home. While in Jacksonville, Dr. Pearson conferred with the president and treasurer of the Florida East Coast Medical Association as well as the secretary and business manager of the Florida Medical Association.

* * *

The Public Relations Committee met at the Hotel Marion, Ocala, June 18, 1933, at 1:30 p. m. 1:30 p. m.

The meeting was called to order by the Chairman, Dr. H. C. Dozier. Those present were: Drs. H. C. Dozier, Ocala, Chairman; Wm. Rowlett, Tampa, President, Florida Medical Association; Thomas E. Buckman, Jacksonville; Stewart Thompson, Jacksonville, Business Manager; and J. Ralston Wells, Daytona Beach, Secretary of the Public Relations Committee.

A general summary of the committee's activities since its first meeting on July 5th, 1931, was made. The general broadcasts, which had been proposed, had all been carried through without default. Addresses had been excellent, well thought out, well written and delivered ably. The courtesy and cooperation of the Station WRUF, University of Florida, Gainesville, was lauded. The press articles were adequate in number, well written, apropos to and timely for the needs for which they were written. The press of Florida, as a whole, has not given us the cooperation that we hoped for, but with persistence and good timely articles it was considered worth while to continue these as conditions warrant.

The files of the committee's secretary have accumulated considerable valuable data which can be used more and more for reference by any physician in good standing in the State. In addition to copies of radio talks and press articles, there are on file numerous articles from other State Societies, which can be used by our County Societies as bases for symposiums on many med-

ical subjects. The files also include references to various organizations which will provide motion picture films on medical and allied subjects. Some of these are delivered free, transportation furnished; others free of rental charge, but the society getting them must pay for one- or two-way transportation; others are rented at a nominal fee. The files contain articles and procedures as carried out by several other State and County Associations in regard to the encroachment of commercial or state medicine upon organized medicine. Several of our local broadcasting stations, notably those of Miami and Orlando, have carried out a magnificent set of radio addresses written and delivered by members of their local county societies. A number of these talks are on file.

The objectives of this meeting of the Public Relations Committee were discussed, and the following activities proposed for the year 1933-34: 1st. Broadcasts over WRUF be carried out as heretofore, but with increasing frequency; in other words, more of them. 2nd. Endeavor to activate our members to deliver more public speeches on medical subjects to lay organizations, *i.e.*, civic clubs, women's clubs, patriotic clubs, etc. These addresses can be delivered by local men in a community, or an application made to the Public Relations Committee for a speaker, or a given subject at a given place. 3rd. Encourage more local societies, wherever possible, notably Tampa, St. Petersburg and Jacksonville, to make every effort to interest their local broadcasting stations in their local county societies. 4th. To continue press articles if, when, and only, the particular publisher desires these articles. It was thought that the various county societies could interest their local press to conduct a column, more or less regularly, said articles to be provided by the local society, or the Public Relations Committee. It must be mentioned that before any press article is printed the article should be censored, or checked, by a member of this committee, or by some physician that this member will delegate to be responsible. A copy of any, or all, such articles should be sent to the Secretary of this Committee for filing and future reference for any one wishing to use any of them entire, for reference, or as a basis for another paper. A copy of all addresses and radio broadcasts must be sent to the Secretary for filing as above stated.

The subject of titles for broadcasts to be sent

out over WRUF from the Florida Medical Association was discussed, and a list decided upon. Various speakers were designated for various articles in such a manner that all parts of the State would have the privilege of being represented in this broadcasting. The exact date for delivery for each broadcast will be definitely arranged as soon as WRUF makes up its winter schedule, at which time each addressee will be notified as to his time of appearance on the program.

Meeting adjourned.

J. RALSTON WELLS, M.D.,
Secretary, Public Relations Committee.

* * *

The members of the State Board of Health who were recently appointed by the Governor are: Dr. N. A. Baltzell, Marianna; Dr. Leland H. Dame, Inverness, and Dr. Harry Dash Johnson, Daytona Beach. The new Board held its first meeting at Tallahassee last month and elected Dr. Baltzell as president.

* * *

The recently appointed Committee on Medical Economics of the Association held a meeting in Tampa, Sunday, June 25th. The chairman of the committee, Dr. Herman Watson, Lakeland, and secretary, Dr. O. O. Feaster of St. Petersburg, with the other members of the committee, Drs. C. A. Andrews, Tampa; J. L. Kirby-Smith, Jacksonville, and R. O. Lyell of Miami, were present. The president of the Association, Dr. William Rowlett, Tampa, and Dr. Bundy Allen, Tampa, a member of the Hillsboro County Medical Economics Committee, were also in attendance.

* * *

The Semi-Annual Meeting of the Medical and Chirurgical Faculty of Maryland will be held at Cumberland, Maryland, September 28th and 29th. The Fort Cumberland Hotel will be the headquarters of the meeting.

* * *

The regular quarterly meeting of the Florida Dermatological Society was held in Jacksonville the week-end of July 2. A clinic was held at the Duval County Hospital and a number of unusual skin cases were presented. Those in attendance were: Drs. Elmo D. French, Miami; C. A. Andrews, J. J. Saxton, Tampa; J. L. Kirby-Smith, E. C. Swift, L. Y. Dyrenforth, John B. Black, J. Frank Wilson and Alan Brown, Jacksonville.

During the first week of June, Dr. Henry Hanson, the State Health Officer, attended the Conference of State and Provincial Health Officers and the Surgeon General's Conference in Washington, D. C. This Conference is an annual event called by the Surgeon General of the United States Public Health Service for the purpose of discussing the vital problems met by public health administrators.

Some of the leading features of the conference consisted of addresses by the following men: Dr. E. H. Cary, President of the American Medical Association; Dr. Dean Lewis of Johns Hopkins University Medical School and Dr. T. S. Cullen, member of the State Board of Health of Maryland and also trustee of the American Medical Association. These men recognize the need for a closer cooperation by the medical profession in public health activities.

* * *

Chicago, during the World's Fair, will welcome the largest radiological congress ever held in the United States when the four national radiological societies will meet there in joint convention. Other members of the medical profession are invited as well. The American Congress of Radiology is scheduled for September 25-30, inclusive, at the Palmer House. According to Dr. Henry K. Pancoast of Philadelphia, president of the Congress, all physicians, physicists, biologists and others connected with the Allied Sciences will be made welcome at the Congress.

The four radiological societies sponsoring the Congress who have eliminated their regular annual meetings for 1933 in its favor are: The American College of Radiology, the American Radium Society, the American Roentgen Ray Society, and the Radiological Society of North America. The Chicago Roentgen Society will also participate.

Dr. Benjamin H. Orndoff of Chicago, chairman of the Executive Council of the Congress, invites members of the medical profession to inquire further of him by writing to 2561 N. Clark Street, Chicago, concerning membership in the Congress, railroad and hotel rates, etc. He points out that the Palmer House is reserving 1,400 rooms for the period of the Congress and guarantees that rates will not be increased or other prices advanced during the session. The Palmer House was selected for the Congress because it is so well arranged for such an event.

and the scientific sessions, as well as scientific and commercial exhibits, will all be on one floor.

Officers of the Congress are: President, Dr. Henry K. Pancoast, Philadelphia; Vice-Presidents, Dr. Albert Soiland, Los Angeles, as president of the American College of Radiology; Dr. Burton J. Lee, New York, as president of the American Radium Society; Dr. John T. Murphy, Toledo, Ohio, as president of the American Roentgen Ray Society; and Dr. Byron H. Jackson, Scranton, Pennsylvania, as president of the Radiological Society of North America; chairman of the Executive Council, Dr. B. H. Orndoff, Chicago; secretary of the Council, Dr. E. L. Jenkinson, Northwestern University, Chicago; treasurer of the Council, Dr. Henry Schmitz, Loyola University, Chicago. The Executive Council, aside from the names just given, includes the chairmen of the various committees.

* * *

The *Fort Pierce News-Tribune* of June 30th carried on its front page the following news item:

"Warning that communists are trying to promote a program of socialism in the practice of medicine, emphasizing the altruistic role which the family physician is playing in these times of economic stress, suggesting that some of the ethics of the profession may be in need of revision so as to promote a wider contact with the public whereby quackery may be combatted and the interests of health advanced, and outlining the year's program of the Florida Medical Association, Dr. W. M. Rowlett, Tampa, president of the state body, addressed members of the Four-County Medical Society and a number of visitors at a meeting held at the New Fort Pierce hotel here Thursday night.

"Visitors included several prominent physicians from Tampa, Orlando and Miami and a number of dentists, nurses and guests who took part on the evening's entertainment program. Attendants were guests of Dr. L. L. Whiddon, newly-elected president of the Four-County Society, at a chicken dinner with all the 'trimmings.'

"Referring to the matter of medical ethics, Dr. Rowlett said that since the code of ethics had been laid down some 400 years before Christ, it is quite possible that it now needs revision in some respects, particularly to permit a wider contacting of the public through the press in order to combat quackery and promote public health. 'There

is a question,' he declared, 'whether the medical profession has been fair to the newspapers and consequently has the right to expect any particular support of its program.' He read some comments along this line from state newspapermen, and said the public relations committee of the state organization has a plan under consideration whereby more cordial relations may be established.

"Others to address the meeting included Dr. John E. Hall, Miami; Dr. Homer L. Pearson, Miami, president-elect of the state association and secretary of the Florida East Coast Medical Association; Dr. R. C. Woodard, Miami, head of Jackson Memorial hospital of that city; Dr. C. D. Christ, Orlando; and Dr. F. C. Metzger, Dr. E. W. Bitzer, Dr. Geo. Cook, Tampa.

"Attendants other than those already mentioned and members of the local society, were: Drs. J. D. Milton, F. R. Morrow and G. Raap, Miami; Mrs. Valda Van Orden, Orlando; Drs. I. O. Bishop, J. C. Coe and F. F. Taylor, dentists, Fort Pierce; Mrs. Fred Warlick, Mrs. S. H. Cooper, Harriett Wynn, Lattice Lauderdale, Alice B. Burton, Gertrude Patterson, Beatrice Williams, Margaret Wild, Hazel Crusius, Miss Sara Dickerson, Fort Pierce.

"The Four-County Society embraces Indian River, Okeechobee, Martin and St. Lucie counties."

* * *

Dr. Horace A. Day of Orlando, has been appointed by Governor Sholtz as a member of the State Board of Medical Examiners, to succeed Dr. N. A. Baltzell of Marianna who recently resigned to accept an appointment to the State Board of Health. Doctor Day was born at Treadway, Tennessee, May 1, 1894. He graduated with the degree of Bachelor of Science from the University of Cincinnati, 1921, and the degree of Doctor of Medicine from the Medical College of the University of Cincinnati, June, 1923. Following his graduation, he served as interne and resident of the Cincinnati General Hospital and resident gynecologist in the St. Louis University Hospital. He was licensed to practice medicine in Florida November, 1925. Since that time he has been actively engaged in practice at Orlando. He is on the staff of the Orange General Hospital, and is a member of the City Board of Health. He has always been active in keeping the practice of medicine on a highly ethical plane.

While in Washington last month, Dr. Henry Hanson, State Health Officer, had several conferences with the representatives of the Rockefeller Foundation, Dr. John A. Ferrell and Dr. W. A. McIntosh, regarding the future of the county health unit work. Dr. Ferrell, who is also president of the American Public Health Association, expressed a keen interest in the county health unit development in Florida and offered to procure as much financial aid from the Rockefeller Foundation as the present economic situation would permit. On the 26th of June a telegram reading as follows was received from Dr. Ferrell:

* * *

"Foundation grants four thousand dollars toward two or three of your county units. Letter follows. Regret larger grant impracticable at present."

* * *

Dr. Kenneth Phillips of Miami spent his vacation in Utah during the month of July.

* * *

Dr. J. A. Pines of Orlando left June 20th for Chicago, Illinois, and Rochester, Minnesota, for a six-weeks' course in X-ray post-graduate work.

* * *

Dr. Roy J. Holmes of Miami recently made a trip to Chicago, where he attended the World's Fair and the A. U. A. convention. En route, Dr. Holmes spent some time at Wadley, Ga.

* * *

Dr. Harper L. Proctor of Jacksonville announces the removal of his offices from the Professional Building to 512 Greenleaf Building.

* * *

Dr. F. W. Foxworthy of Miami was a recent visitor at Frankfort, Indiana.

* * *

Dr. E. B. Maxwell of Miami is spending his vacation in the north. Before his return, about October 15th, he will attend clinics in New York and Chicago.

* * *

Dr. J. M. Hoffman of Pensacola addressed the First District Nurses' Association at their meeting in May. Dr. Hoffman's subject was "The Responsibility of the Nursing Profession in the Cancer Situation."

* * *

Dr. and Mrs. Max Gherltler of Miami sailed, during the month of June, for southern France where they will spend their vacation.

JOSEPH ROBERT SIMPSON

Dr. Joseph Robert Simpson of Miami, for many years a member of the Florida Medical Association, died February 13th.

Dr. Simpson was born in New Bern, North Carolina, fifty years ago. He received his medical education in Virginia, graduating from the Medical College of Virginia in 1909. He practiced medicine in Gainesville, Ga., until 1925 when he secured his license in Florida. At that time he came to Miami, where he specialized in eye, ear, nose and throat work until 1928. There followed two years of practice in Ft. Lauderdale and then a return to Miami, where he had since been located.

Dr. W. A. Haggard of Miami recently left for an extended vacation. After visiting his home in Alabama, he will visit Milwaukee and the Chicago Fair.

* * *

Dr. Graham E. Henson of Jacksonville recently resigned as Chief Medical Officer of the United States Veterans' Administration and has opened offices in the St. James Building. He announces that his practice will be limited to internal medicine.

* * *

At the Annual Meeting of the American Medical Association, held in Milwaukee, June 11-16, Florida was well represented in that eighteen members of this Association were present. Owing to the inability of the regularly elected delegates and alternates to attend, Dr. H. Marshall Taylor of Jacksonville was appointed by President Rowlett to represent this Association in the House of Delegates and Dr. Taylor served in that capacity throughout the annual convention. The total registration at the Milwaukee session was 4,601. The following members of the Florida Medical Association were in attendance:

Barge, H. A.	Miami
Darrow, Anna A.	Fort Lauderdale
Doern, William Y.	Daytona Beach
Harris, Herrman Hirsch	Jacksonville
Haggard, W. A.	Miami
Jones, Walter C.	Miami
Metzger, Frank C.	Tampa
Mills, Herbert R.	Tampa
McMurray, E. R.	Bartow
Nichol, E. Sterling	Miami
Quillian, Warren	Miami
Rudolph, Council C.	St. Petersburg
Taylor, Joseph W.	Tampa
Taylor, H. Marshall	Jacksonville
Walkup, A. Clark	St. Augustine
Wood, A. J.	St. Petersburg
White, Benj. L.	St. Petersburg
Wilhoite, R. E.	Lake Wales

Dr. Peter W. Besenbruch and family of Davenport are enjoying a vacation in Germany. They expect to return about August 15th.

* * *

Dr. H. A. Barge and Miss Drucilla Albrest of Miami were married in that city on May 26th. They have returned from an extended wedding trip which included Milwaukee, where Dr. Barge attended the meeting of the A. M. A., Chicago and the World's Fair, Niagara Falls, New York City, Atlanta and Newnan, Ga. Dr. Barge is the genial treasurer of the Dade County Medical Society.

* * *

Dr. and Mrs. S. E. Driskell of Jacksonville have returned from a two-weeks' vacation spent at Hendersonville, N. C.

* * *

Dr. S. J. Simmons, Jr., formerly of Clewiston, announces his removal to Arcadia.

* * *

Dr. Jack Halton of Tampa left recently for Chicago to attend the meeting of the American Proctologic Society. Following this meeting, he attended the convention of the American Medical Association in Milwaukee.

COMPONENT COUNTY SOCIETIES

DADE COUNTY MEDICAL SOCIETY

The regular meeting of the Dade County Medical Society was held at the Huntington Club Rooms, Miami, Friday evening, July 7th. The following program was presented:

- "Radiant Energy, Its Characteristics, Biologic Action and Some Means of Protection Against the Harmful Effects to the Eyes"—Nelson M. Black, Miami.
- "Acute Appendicitis of Traumatic Origin"—N. Duncan Owens, Miami Beach.
- "Recent Advances in Urologic Surgery"—S. Parke-Smith, Cincinnati, Ohio.

The Executive Committee of the Dade County Medical Society met Friday evening, June 2nd.

The principal business concerned the resignation of Dr. Homer Pearson as managing editor of the "Bulletin." The Committee considered the resignation in the light of Dr. Pearson's new work as president-elect of the State Association and recommended to the Society the acceptance of the

resignation with sincere appreciation of the work Dr. Pearson has done in making the "Bulletin" a success.

The Committee also recommended, in accordance with the report of the Committee on Medical Economics, that Dr. Roy Holmes continue as editor and become managing editor.

ESCAMBIA COUNTY MEDICAL SOCIETY

A regular meeting of the Escambia County Medical Society was held at Pensacola, May 9th. At the business session, which followed the scientific program, it was voted to incorporate the society.

ORANGE COUNTY MEDICAL SOCIETY

The June meeting of the Orange County Medical Society was called to order in the lounge of the Orange General Hospital, Wednesday evening, June 17, at 8:30 p. m., Dr. Johnston, president, in the chair.

Dr. Shoemaker read a paper on "The Financial Plight of the Medical Profession."

The new Constitution and By-Laws which were read at the previous meeting, having been sent to all members for examination, were approved and adopted as the code for the county society.

A committee was appointed to look into the possibilities or contacting with some individual, who might operate for the physicians, under the control of the Medical Society, a collecting agency.

An active discussion of the type of papers that were being presented over WDBO was indulged in and it was decided these papers should be approved by the Board of Censors or the Councilor for the district, before they are read. It was decided some time in July to have, instead of the regular meeting, a doctors' afternoon at some one of the camps to which would be invited friends of members of the society and, if possible, some outstanding medical man, who might be in the section at that time.

POLK COUNTY MEDICAL SOCIETY

The regular meeting of the Polk County Medical Society was held Wednesday evening, June 21st, at the County Hospital, Bartow. Dr. William M. Rowlett, president of the Association, was guest of honor and principal speaker. About thirty members of the society were in attendance.

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, Inc.
State Editor
Mrs S. E. DRISKELL
1410 Windsor Place
Jacksonville, Florida.

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We are indebted to Mrs. Herrman Harris of Jacksonville, a delegate from Florida to the National Meeting, for the following write-up:

The Eleventh Annual Meeting of the Woman's Auxiliary to the American Medical Association took place in Milwaukee, June 12-16, 1933, Mrs. James F. Percy, president, presiding. There were 845 present, 39 board members, 65 delegates, 13 alternates, 472 members, 266 guests. The roll call showed two delegates from Florida, Mrs. Eugene G. Peek, state president, and Mrs. Herrman Harris, regional Hygeia Chairman.

Mrs. James F. Percy, National President, gave a splendid address and thanked all for their cooperation during the past year—a very sad year in one respect because of the passing of our beloved late President, Mrs. Walter Jackson Freeman. A tribute of respect was then given in her memory.

The standing committees gave excellent reports. The organization chairman was proud of her new states, Nevada, New York and Utah. There are twenty-one new southern auxiliaries, Wisconsin, however, leading other states with thirteen new ones. There were many publicity programs, Georgia excelling with 125. The Hygeia Chairman, Mrs. R. N. Herbert, reported Hygeia, in spite of the depression, went over the top in five states and all were active. Thirty-five hundred subscriptions will be our goal again this year.

The nominating committee consisted of Mrs. Packard, Mrs. Hunsberger, Mrs. McGlothlan, Mrs. Haggard, Mrs. Sargent, Mrs. Bonner White and Mrs. Herrman Harris. They presented the following slate which was unanimously adopted:

President-elect—Mrs. Robert Tomlinson, Wilmington, Delaware.

Vice-presidents—Mrs. Horace J. Whitacre, Tacoma, Washington; Mrs. Rollo K. Packard, Chicago, Illinois; Mrs. Charles Oates, North Little Rock, Arkansas; Mrs. H. Roy Van Ness, Newark, New Jersey.

Treasurer—Mrs. James F. Percy, Los Angeles, California.

Recording Secretary—Mrs. F. Mitchell Burns, Denver, Colorado.

Directors for two years—Mrs. Rock Sleyster, Wauwatosa, Wisconsin; Mrs. Henry Trigg, Fort Worth, Texas; Mrs. C. C. Tomlinson, Omaha, Nebraska.

Director for one year—Mrs. James N. Brawner, Atlanta, Georgia.

Mrs. James Blake of Minnesota, the new president, taking office, stated there would be no radical changes this year, that the same policy would prevail in all departments.

Milwaukee was most hospitable. There were several delightful luncheons and dinners at the different hotels, enjoyable automobile rides to all parts of the city, teas in very beautiful homes, an informal dance at the Wisconsin Club and a formal ball and reception at the Hotel Schroeder. Much praise is due Mrs. Rock Sleyster and her able committee. Because of the many cordial contacts the 1933 convention will be most pleasantly remembered. The next convention will be held in Cleveland, Ohio, 1934.

Respectfully submitted,
(Mrs. Herrman) PEARL L. HARRIS.

ALACHUA AUXILIARY

Mrs. E. G. Peek of Ocala, president, and Mrs. Wilburn Lassiter of Gainesville, secretary-treasurer of the Woman's Auxiliary to the Florida Medical Association, were guests of honor at a beautiful luncheon given early in June by the Auxiliary to the Alachua County Medical Society, at 322 West University Avenue.

Following the luncheon a short business session was presided over by Mrs. D. T. Smith, president of the Alachua County Auxiliary. At this time hostesses were appointed to assist at the reception to be given by the Alachua County Hospital in observance of National Hospital Day. They included: Mrs. J. H. Colson, Mrs. N. W. Sanborn, Mrs. Wilburn Lassiter, Mrs. S. D. Rice, Mrs. Edwin H. Andrews, Mrs. J. Maxey Dell, Jr.,

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon ?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	55%
Bay	Allen, H. Miller, M.D., Millville.					17%
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		60%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	100%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	90%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	41%
Duval	F. L. Fort, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	72%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	60%
Hillsboro	C. W. Bartlett, M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	73%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	56%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	82%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	88%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	61%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	46%
Marion	J. L. Chalker, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	62%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	Louis Orr, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	73%
Palm Beach	James L. Carlisle, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	89%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	67%
Pinellas	Alvin L. Mills, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg St. Petersburg	No.	76%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	83%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	34%
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	91%
St. Lucie-Okeech- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	100%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	92%
Seminole	J. T. Denton, M.D., Sanford.	2nd Friday	8:00 P.M.	City Hospital Sanford		100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	Jas. L. Weeks, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	71%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	52%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.

Mrs. D. T. Smith, Mrs. G. C. Tillman and Mrs. James L. Strange of McIntosh.

Plans were discussed for a meeting to be held at an early date with the Marion County Auxiliary at Silver Springs. The president appointed Mrs. James L. Strange, chairman of the social committee, to be assisted by Mrs. Edwin H. Andrews.

Mrs. John E. Maines, Jr., was appointed hygiene chairman.

Mrs. Peek who was recently elected president of the Woman's Auxiliary of the State, gave a most interesting account of the annual meeting in Hollywood. After touching upon the social part of the meeting, she spoke in glowing terms of the session that brought the women together in discussion of business of a more serious and deeper nature. She also related the plans made by the State Auxiliary whereby they might live up to the work as outlined by the American Medical Association Auxiliary.

Great interest was expressed in the history of the State Auxiliary as presented by Mrs. Lassiter, who organized the auxiliary in 1926 and served as the first state president during 1926-28, and later as state historian from 1932-33.

Members present with Mrs. Peek and Mrs. Lassiter were: Mrs. D. T. Smith, Mrs. J. J. Colson, Mrs. S. D. Rice, Mrs. James L. Strange, Mrs. J. Maxey Dell, Jr., Mrs. Erwin H. Andrews and Mrs. J. A. Dailey of Micanopy.

DUVAL AUXILIARY

The Auxiliary to the Duval County Medical Society held the last meeting of the season Thursday afternoon, June 8th, at the home of Mrs. Edmund H. Teeter on Edgewood Avenue.

Mrs. George Beckman presided at the business session. Mrs. Herriman Harris and Mrs. E. W. Veal reported on the State meeting in Hollywood last month, where they represented the local Auxiliary.

An informal social hour followed the business session. Mrs. Teeter was assisted in serving refreshments by Mrs. Frederick Oetjen, co-hostess, and Mrs. Shaler Richardson presided at the punch bowl.

Several pharmaceutical houses, whose products have not been passed by the Council, are circulating Florida doctors. Protect yourself by patronizing Journal Advertisers.

ADVERTISERS' NOTES

NEW SERVICE IN RABIES VACCINE, LILLY

Rabies Vaccine, Lilly, V-776, heretofore available on order to the Lilly Laboratories at Indianapolis, will hereafter be supplied through the drug trade. This should be of particular interest to all physicians because treatment for rabies is an emergency measure and it is important that it be instituted early.

This innovation is made possible by reason of the superior potency of the material even with a six months' dating.

The procedure is simple enough. When Rabies Vaccine is needed notify your pharmacist. He probably will have it in stock. Should he not have it he can secure it for you in a very short time. Lilly's Rabies Vaccine is supplied in 1 cc. syringes ready for immediate use. The treatment consists of fourteen doses. In more than sixteen years failure in Lilly Vaccine has been recorded in but three cases and in each of these the lesions are said to have been about the mucous membranes of the face, a factor which is likely to hasten the onset of symptoms.

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Of considerable interest to the medical profession is an announcement which has come from the National Drug Company, advertisers in this Journal. Under date of June 7th, the Philadelphia College of Pharmacy and Science conferred

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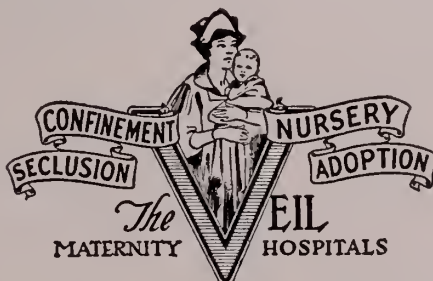
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upon Mr. H. K. Mulford, Director of the Biological and Biochemical Laboratories of the National Drug Company, the degree of Master of Pharmacy. This tribute, which is the highest honorary degree given in pharmacy, was made in recognition of Mr. Mulford's contributions to his profession.

MERCK DISPLAY AT WORLD'S FAIR

According to figures just completed, over eight thousand persons viewed in a single day the Merck exhibit at the Chicago Fair. The popularity of the chemical display is an indication of the growing interest of the public in scientific matters.

Located on the ground floor of the Hall of Science, the exhibit of Merck & Co., Inc., depicts the progress made in chemistry during the past century. It is situated between the chemical group in which the display of Union Carbide & Chemical Company is outstanding and the purely medical group.

Attracting most attention in the Merck exhibit is the Nososcope, a stereopticon through which can be seen something of the history and progress of diseases. It briefly depicts the constant battle being waged by science against disease. By actual count, ninety-nine persons used the Nososcope in ten minutes.

A Pharmacy Desk with a professional pharmacist in attendance is likewise attracting considerable attention. In the presence of the on-lookers the pharmacist demonstrates the art of his profession in the preparation of pills, the weighing of very small quantities of powders, the filling of capsules and the preparation of other types of pharmaceutical products required in prescriptions.

Nine-foot prisms of plate glass, which typify the mass of chemicals that are used today in science and industry, form a part of the outside wall of the exhibit. Selected for their brilliance and color they attract considerable attention.

The diorama of the Merck plant, a three-dimensional picture in which the foreground is in modelled perspective, faithfully represents the extensive works, offices and laboratories at Rahway, New Jersey.

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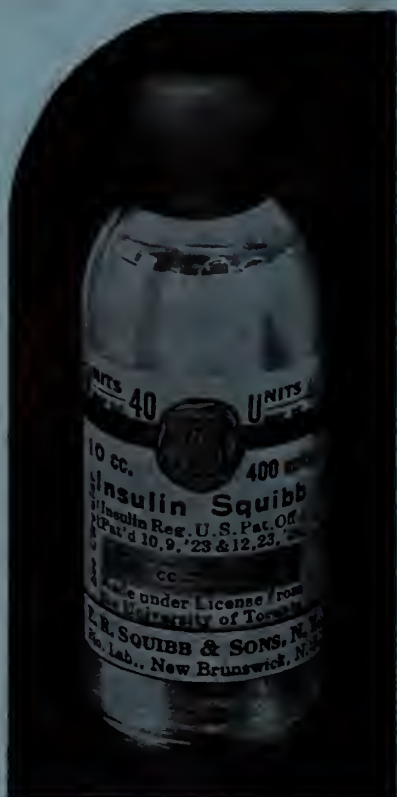
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THE definite increase in mortality resulting from diabetes indicates a greater prevalence of the disease. In New York City alone, in 1931, diabetes took more lives than Typhoid Fever, Measles, Scarlet Fever, Diphtheria, Whooping Cough and Cerebral Meningitis, all combined.*

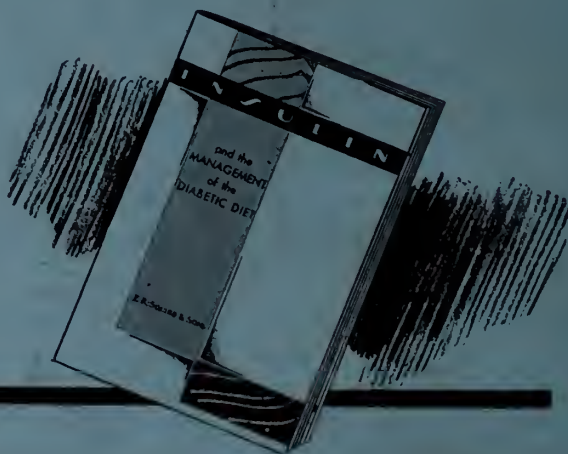
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* Dr. Charles Bolduan, *New England Journal of Medicine*, 7-14-32.



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VOLUME XX
NO. 2

Jacksonville, Florida, August, 1933

Yearly Subscription, \$3.00
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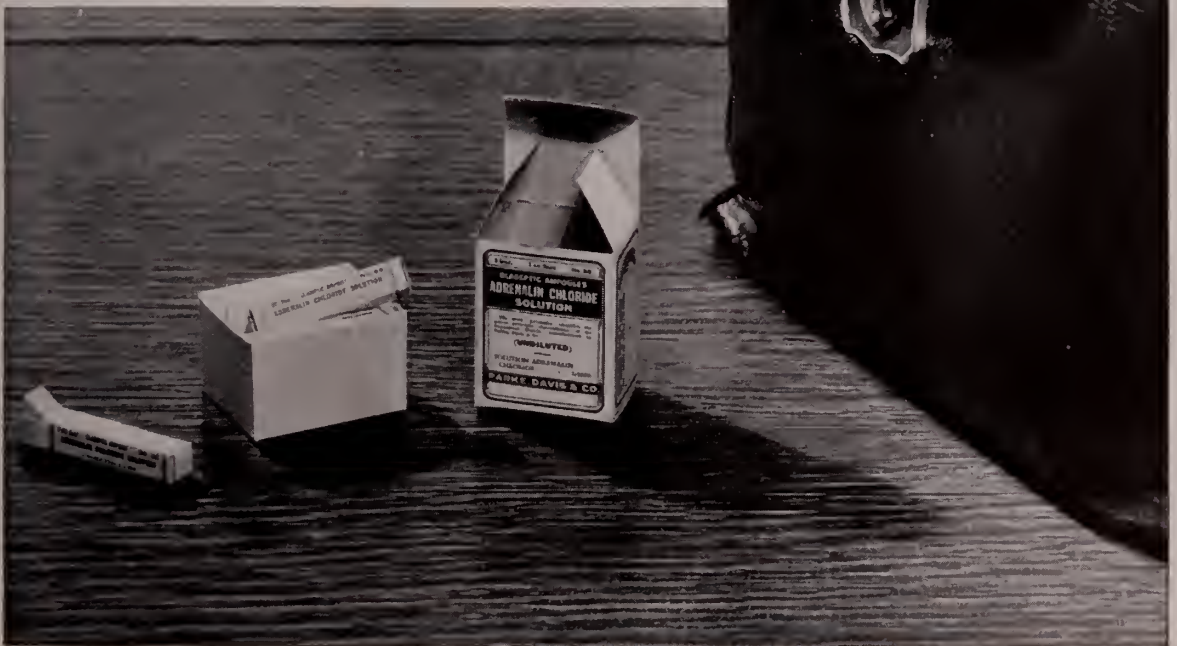
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, August, 1933

Number 2

LYMPHOPATHIA VENEREA*

ALAN BROWN, M.D.,
Jacksonville.

Lymphopathia venerea is a venereal disease of lymphoid tissue characterized usually by indolent inguinal adenitis in the male and anorectal pathology in the female. It has been variously termed "climatic bubo" and "strumous bubo," "Nicolas-Favre disease" and "lymphogranuloma inguinale." Wolf and Sulzberger suggested the term "lymphopathia venerea" because the disease is transmitted venereally, and the lymph glands are primarily involved. This term embraces the condition as seen in women and does not give rise to confusion with granuloma inguinale.

The inguinal adenitis of this condition was probably known to the ancients as Galen in his classification of buboes referred to the subchronic adenitis of the groin as "strumous bubo." Celsus found these strumous buboes difficult to treat. In more modern times the term "climatic bubo" was applied as the condition was thought to be a tropical one. Nicolas, Durand and Favre in 1913 first described the clinical and histological features under the term "subacute inguinal lymphogranulomatosis," establishing this disease as a pathological entity. Since the World War increasing attention has been given to this condition in European medical literature. Hillsman, Wilshusen and Zimmerman in the Archives of Dermatology and Syphilology, September, 1928, first reported a case occurring in this country. Since then its recognition has been reported with ever-increasing frequency. A diagnostic skin test was developed in 1925, which has recently led to the recognition of the anorectal syndrome, usually seen in women, as another manifestation of this disease. Though the skin manifestations are slight, the dermatologists have contributed most to our knowledge of this disease.

Until the work of Nicolas, Durand and Favre, lymphopathia venerea was considered a tropical disease of rare occurrence. Since the war it has been recognized in most countries of the world with increasing frequency. In this country, at first, it was seemingly confined to the Atlantic

seaboard, but is now seen frequently in cities on the Great Lakes and is being reported in the interior cities. The disease has been seen several times in dispensary practice in Jacksonville in the last year and a half, and will probably occur with increasing frequency in Florida in the future.

In Europe, lymphopathia venerea is mostly among whites, there being few negroes. In the north the disease is mostly among negroes or traceable to venereal exposure with members of that race. In the south it is predominantly of the colored race.

ETIOLOGY

From the pus of fluctuant buboes and excised tissue the organisms cultured and demonstrated in histologic section have been predominantly, but not consistently, a diphtheroid bacillus. Virulent pus may be culturally sterile and the filtrate from a Berkfeld or Chamberlain filter, though free from bacilli, produces the disease in animals. It is therefore generally accepted that the causative organism is a filterable virus, the diphtheroid organisms being saprophytes.

PRIMARY LESION

The primary lesion of lymphopathia venerea is an evanescent pinhead-to-pea-sized papule or one or two herpes simplex-like vesicles which in the male usually occur on the glans penis or prepuce. Appearing from six to thirty days following exposure, the lesions are so slight and symptom-free as to escape notice in the majority of cases. It is rare that physicians see the primary lesion and then only when it persists until the adenitis appears. In those rare female cases in which inguinal adenitis develops, the primary lesion is thought to occur on the labia or clitoris. The common site of the female primary lesion is probably the cervix or the posterior fornix. The glands draining the location of primary lesion are those involved in the definitive disease. Thus, an external genital primary lesion gives rise to inguinal adenitis of one or both sides and a deep vaginal lesion to involvement of the glands of the pelvis.

GENITAL SYNDROME

The onset of the inguinal adenitis, following the appearance of the primary lesion by approx-

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

imately a week, is insidious and almost painless. The glands are discrete, firm, and, being relatively nontender, simulate those of an early syphilitic infection. At this time slight malaise, fever and headache may occur. In a few cases skin eruptions have occurred, but they are of the erythema nodosum or erythema multiforme type, not resembling a syphilitic rash. As the process advances the glands continue to enlarge, become matted together and firmly adherent to the overlying skin, which assumes a dusky red color. As the glands become fluctuant, the skin takes on a violaceous hue. Though the mass attains the size of a lemon the absence of pain is striking. If not incised the skin ruptures to form one or more sinuses which at first discharge a thick creamy pus. Later the pus becomes sero-sanguinous and, if untreated, drains for months and even years. Healing is by fibrotic scars which retract, giving an appearance similar to scrofuloderma; hence the term "strumous bubo." Sequelae of the inguinal adenitis may be extension to the deep pelvic glands causing the anorectal syndrome or elephantiasis of the external genitals by the interference of lymph drainage through scar contracture.

ANORECTAL SYNDROME

In women the first manifestations of lymphopathia venerea are usually due to involvement of the perirectal glands. These are anal fistulas and rectal strictures. It is believed that these latter constitute the majority of cases formerly known as anorectal syphilomata of Fournier. When we consider the high incidence of syphilis in cases of lymphopathia venerea it is not surprising that such strictures have been attributed to syphilis. If we consider the usual noncontractile scar of syphilis and the prompt functional and roentgenological approach to normal of the hour-glass stomach of gastric syphilis following antiluetic therapy, is it not suggestive that these rectal strictures have usually received no benefit from antiluetic treatment and operative interference usually becomes necessary?

FREI TEST

In 1925, Wilhelm Frei described a specific, diagnostic, cutaneous test which has led to accuracy of diagnosis of lymphopathia venerea and established the relation of the inguinal and rectal syndromes. Material for this simple test is obtained by the sterile aspiration of fluctuant inguinal glands. The pus is diluted with from five to ten parts of normal saline solution and steri-

lized by heating at 60 degrees centigrade for one hour on the first day and two hours on the second day. The test is performed by the intradermal injection of 1/10th of one cubic centimeter of the turbid fluid into cases of known lymphopathia venerea to test the vaccine and into suspected cases to establish the diagnosis. Tests are read from 48 to 72 hours after injection. A positive test is a reddish, infiltrated papule 7.5 to 20 mm. in diameter, frequently surrounded by a zone of lighter color.

The accuracy of this test has been demonstrated in a large series of cases by DeWolf and VanCleve. Working in the Cleveland City Hospital, they made 1103 intradermal tests on 1010 patients. Twenty-one tests on eleven patients showed confusing reactions, neither positive nor negative. Their histories and the clinical findings in no way indicated lymphopathia venerea. Of the remaining 999 patients 58 gave positive reactions and had or gave a history of subacute inguinal adenitis or had the anorectal form of lymphopathia venerea. Of 75 cases of chancroidal infection tested, 73 were negative. Of the two positive cases, one gave a history of an inguinal adenitis simulating lymphopathia venerea; the other case was considered a mixed infection of this disease and the Ducrey bacillus. In 84 cases of early, active syphilis the Frei reaction was consistently negative.

The Frei test is considered specific and to give no false positives. When once positive it is thought to remain so throughout life. There seems to be a reciprocal immunological reaction between syphilis and lymphopathia venerea which is little understood. Cases have been reported in which the Wassermann reaction has become positive for several weeks in the presence of a lymphopathia venerea infection, long and thorough search failing to reveal any evidence of syphilis. The presence and treatment of active syphilis has apparently delayed the Frei test in becoming positive in clinical cases of lymphopathia venerea until the antiluetic treatment was discontinued. Another cause of negative Frei tests seems to lie in the virus belonging immunologically in two groups. The great majority of cases fall into what we shall call group I. Vaccines from group I give positive reactions in group I cases, but negative reactions in group II cases. Vaccines from group II give positive reactions in group I and II cases. Because of specificity of the Frei test it should be employed whenever possible in all cases of inguinal adenitis

of chronic type and all cases of anal fistula and rectal stricture.

DIFFERENTIAL DIAGNOSIS

The conditions to consider in the differential diagnosis of the inguinal infection are tuberculous, gonorrheal, luetic and chancroidal buboes. Tuberculosis of the inguinal glands is rare and secondary to tuberculous infection elsewhere. The course and appearance of the disease may well simulate lymphopathia venerea. In gonorrheal and chancroidal buboes infection at the primary site is present and characteristic, while the tenderness of the buboes leaves little doubt in these more rapidly developing conditions. The glands remain discrete until fluctuation. In chancroidal infections autoinoculation will aid in the diagnosis. Luetic glands are chronic and nontender, but are discrete and are accompanied by additional evidence of the disease. Granuloma inguinale should cause no confusion as it is primarily a disease of the skin, characterized by fungating granulomatous masses.

The anorectal pathology of lymphopathia venerea is not as characteristic as in the inguinal form. Diagnosis is by exclusion of other conditions which may give rise to similar lesions and the Frei test. Ulcerative colitis, amebic infections and cancer may give rise to stricture of the rectum. Biopsy when possible should be resorted to in the presence of a positive Frei test.

PATHOLOGY

The gross pathology of lymphopathia venerea is that of an adenitis with periadenitis, matting the glands together in a nodular mass which adheres to the adjacent skin. There may or may not be sinuses connecting with multiple flattened and stellate abscesses in the glands, which contain a thick, creamy pus. Microscopic study reveals the picture of a subacute lymphadenitis, the gland almost filled with granulation tissue composed of lymphocytes, plasma cells, fibroblasts, epithelioid cells, large cells with one or two round or oval nuclei and an occasional Langerhans' type of giant cell. The gland is studded with stellate or ramified abscesses filled with granular debris. The abscess is surrounded by a zone of epithelioid cells, often arranged in palisade formation. This picture, though typical of this disease, may occur in other conditions.

TREATMENT

As is apt to be the case in a new disease, several remedies have been tried and recommended, but no treatment has given universal satisfaction.

All have been discarded as worthless by some. Tartar emetic is recommended by some workers. Intradermal inoculation with the Frei vaccine at frequent intervals has apparently given good results in some cases, but has failed entirely in others. Block dissection of the inguinal glands is effective, but is not often feasible in these cases of slight symptoms. X-ray seems to expedite the evolution of the process and minimize the scarring, but its value is not such as to recommend it except in conjunction with other forms of treatment. The rectal cases should have as intensive and manifold treatment as possible, in view of the possibility of stricture. When stricture occurs operation only is of avail, either dilatation or colostomy. At the present time shotgun treatment and following one's hunches will probably give the most gratifying results.

The outlook in the inguinal cases is good, if one makes the reservation that rectal disease and genital elephantiasis may occur at a later period. In the rectal cases the prognosis is that of the developed pathology and the surgery indicated.

SUMMARY

Lymphopathia venerea is a venereal disease of the lymphoid tissues existent in Florida. It is preceded by an evanescent primary lesion, seldom seen. The gland groups involved are usually the inguinal glands in the male and the perirectal in the female. The subacute, nontender, matted inguinal adenitis is easily recognized by one familiar with the condition. The rectal disease may give rise to anal fistulas or rectal strictures. Diagnosis is confirmed by the intracutaneous diagnostic test of Frei. The treatment of lymphopathia venerea is neither specific nor satisfactory to date.

DISCUSSION

Dr. J. L. Kirby-Smith, Jacksonville:

I appreciate very much being assigned to discuss the paper by Dr. Brown. Having had the copy of his paper for only a few days it was not possible to obtain suitable information regarding the subject he is giving us today on a new form of venereal bubo. Nevertheless, I will attempt to add something to the discussion of this paper.

In a continuous association for more than twenty years in well attended clinics for syphilis and dermatology, I can recall very few cases of a doubtful diagnosis in the matter of ulcerations around the genitalia in which it was not possible to include cancer, chancroids, granuloma ingui-

nale, syphilis or tuberculosis. I must admit difficulties and, as well, unsatisfactory results from treatment. I judge from Dr. Brown's report today that some of these cases might be considered as the type of ulcerations that he is reporting as lymphopathia venerea and is depending upon the intradermal test of Frei that has been elaborated to differentiate a clinical diagnosis of a suppurative bubo that is occasionally seen.

No doubt the essayist is referring to climatic buboes or strumous buboes, a tropical condition that has been observed for a number of years in different tropical countries. As I understand it, this condition is different from those that are seen from chancroid infections, syphilis and granuloma inguinale and this diagnosis is dependent upon an intradermal test as advocated by Frei, but the situation is not clear in my mind.

We are having at this meeting another report. Dr. Harkness is presenting a case of granuloma inguinale. It would have been very interesting to have had at the same time this paper and Dr. Brown's.

It appears to me that even with this test of Frei's there is some doubt as to the disease in this country, venereal bubo being a separate and distinct disease. Unquestionably, there is a climatic bubo in some parts of tropical countries; nevertheless, in reading the literature on the subject, it is my opinion that but few of the cases have been studied and reported with a definite cause. Please understand that a suppurative bubo is merely a symptom of an infection.

Dr. E. D. French, Miami:

The dermatologist does not often have the opportunity to see cases of Nicolas-Favre disease except in consultation after the disease has existed for some time. In that case the patient presents in the inguinal region, and upper thigh, a large dark red violaceous mass with numerous fistulous processes. The lesion is painless. The openings of the fistulae do not tend to become chancroidal in nature. Through the abdominal wall the iliac glands may be palpated. They are hard. They are painless.

In cases of chancroid we have a different picture. When a chancroidal bubo breaks down it has one unilocular cavity, as a rule, deep and painful,—later, a single fistulous opening, while the margins of the opening become chancroidal.

Now, we all know that ordinary genital lesions usually are mixed infections. In fact, an early

genital lesion by its very irritation often incites the patient to further sexual excess and renders him more liable to a mixed infection. The primary lesion of lymphogranuloma is rather nondescript in character. It might be vesicular or it may be a red granular surface in which case many of the lymphatic tracts are nodular, swollen, and have sinus formations along the tracts.

Does it make any difference to the patient as to whether it is a chancroidal bubo or whether it is Nicolas-Favre disease? It does, because the time to heal these patients and prevent mutilation is early in the disease when the bubo is a single, nontender glandular enlargement with perhaps a little pitting about it. In that stage we get a Frei reaction and we can save that patient a lot of probable mutilation by early enucleation. After several glands are involved they are much more difficult.

The management of a chancroidal infection requires a different therapy.

Now, as to the attitude that Nicolas-Favre disease is responsible for the greater number of our cases of rectal stricture, I don't think that can hold. Chancroidal and syphilitic lesions are common about the anorectal region, in women so affected, and we find them with simple chancroidal, gonorrheal, and mixed infections in this region.

Dr. J. Frank Wilson, Jacksonville:

I do not believe that lymphopathia venerea is a clinical entity. In spite of reports to the contrary I believe there is such a thing as a gonorrheal bubo. I have seen numerous buboes, a great many with induration, and it has been my experience that if one bubo is opened all the others in the vicinity will become infected and drain and the entire mass will slough out. I have also seen some that have indurated as Dr. Brown stated, but have not sloughed out but upon being opened remain indolent for months. I have seen patients with gonorrheal bubo have cellulitis from the drainage and induration of all the surrounding tissues, but have never obtained gonococcus from the pus. In every case which I have seen where the etiology was doubtful there has been pus and shreds in the urine and I believe a great majority to be of gonorrheal origin.

Dr. H. E. Palmer, Tallahassee:

Years ago I saw a case of inguinal granuloma. The patient had all the symptoms the doctor has

given here, cellulitis, gangrene or death of parts. In spite of everything we did it destroyed the skin and superficial tissues in that region and the man finally died. We could not check it.

Dr. Alan Brown, Jacksonville (concluding):

My purpose in choosing this subject was to call the attention of the profession in Florida to the fact that this condition does exist. I think it satisfies all of the requirements of a clinical entity, there being one possible weak feature, namely, the causative organism is a filterable virus and has not been cultured. The incidence and wide distribution is attested by the citation in current literature. Its existence and prevalence in Florida must be determined by your recognition of the condition, which will in time be proven.

APPENDICITIS

INCREASE IN MORTALITY RATE AND ITS INFLUENCING FACTORS*

HERBERT E. WHITE, M.D., F.A.C.S.,
St. Augustine.

The death rate of appendicitis is a problem that demands the serious consideration of the medical profession. Vital statistics show the mortality from this disease to be higher in the United States than in any other civilized nation. That this mortality is on the increase at a time when hospitalization, medical and surgical skill are so advanced, is an unusual situation.

A glance at the yearly increasing mortality rate of our own state should be enough, in itself, to stimulate us all to awake and consider those factors causing this rise. These factors may be listed as follows:

I. PRE-OPERATIVE FACTORS

(A) Factors controlled by the patient

(B) Factors controlled by the physician and surgeon

II. OPERATIVE FACTORS

III. POST-OPERATIVE FACTORS

I. PRE-OPERATIVE FACTORS

(A) *Pre-operative factors controlled by the patient and family.*

Bower,² Finney,³ and others show by their survey that pre-hospital factors are responsible for ninety per cent of the deaths and that the abuse of laxatives causes the greatest increase in the mortality rate. If a case of fulminating appendicitis is treated by a laxative and general

peritonitis develops, the patient has but one chance in seven of recovery. The medical profession should combat this by a campaign to further educate the public that abdominal pain and cramps do not call for a laxative. The patient should send for a doctor and not for castor oil.

It is indeed fortunate that vomiting is present in about seventy-five per cent of all cases of acute appendicitis and in these, the purgative drug being regurgitated, probably does little harm. The belief that an attack of appendicitis may be scattered by the use of cathartics, still prevalent in the minds of many laymen, should be discouraged.

Procrastination on the part of the patient or the patient's family to consult a doctor early, is another factor. The fear of operation and the financial status of many families have their influence on the mortality rate.

The tendency of the public to consult the quack, who has gained his patients by newspaper and radio advertising, also has its effect on increasing this rate.

(B) *Pre-operative factors controlled by the physician and surgeon.*

Failure to make an early diagnosis heads this list and has the greatest influence on mortality. H. Chitty⁴ believes that if every patient with an acute appendicitis could be operated on within the first twenty-four hours, death could be prevented. However, in a review of over eleven thousand cases admitted for operation within the first twenty-four hours after the onset of the symptoms Bower² found one death in forty-six. The surgeon is usually dependent on the general practitioner for early cases, as very few persons, suffering from abdominal pain, consult him directly.

We have all made the common mistake of waiting for an acute appendicitis to subside. We have waited to make a positive diagnosis until signs of peritonitis have developed, and thus missed the most favorable time for operation. Expectant treatment should be condemned, as this is only a blind behind which we wait for something to occur, and something does occur with great frequency, namely: perforation, abscess, general peritonitis and other serious complications.

Failure to recognize the acute obstructive appendicitis, as pointed out by Wilkie,⁵ is another factor that belongs in this group. It is in this type that the mortality is so much higher. The

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

clinical symptoms are so close to those of an acute intestinal obstruction that valuable time may be lost before a definite diagnosis is made. Of the two types of appendicitis, the obstructive type has the most pronounced early symptoms and will become a fulminating appendix much sooner than the acute inflammatory. To reduce the yearly sacrifice of life, one must be able to diagnose the early obstructive case from the inflammatory and insist on operation during the afebrile stage. Deaver⁶ has said: "It is not always possible to make clinical diagnosis harmonize absolutely with pathological manifestations." To deliberately adopt a waiting policy when an obstructive appendicitis has been diagnosed is to invite perforation and peritonitis.

Under factors controlled by the physician before operation, mention must be made of the fact that acute appendicitis is a disease of all ages and early diagnosis is often more difficult in the young and old than in those of middle life. In children it is vastly more important to make an early diagnosis of an acute intra-abdominal condition than in an adult, for the ability of the peritoneum to localize an abscess is not nearly as great.

Coe,⁷ Pounders,⁸ Horsley,⁹ and others have called our attention to certain anatomical conditions peculiar to early life, which make a diagnosis of children difficult. As has been pointed out repeatedly, the position of the appendix in children is less constant than in adults, it frequently being much higher than McBurney's point. It may be retroceally placed and completely buried by vestigial bands. The cecum may be incompletely rotated. The appendix itself is larger, longer, more funnel shaped and more delicate in structure, containing a larger proportion of lymphoid tissue. With these facts in mind when examining children, the mortality rate can be reduced.

Early diagnosis in children is more difficult because abdominal pain is frequent, while abdominal examination is often unsatisfactory. Any gastro-intestinal upset in children, when there is no evidence of trouble in the ears, throat, kidneys or lungs, should be regarded as potentially appendicitis until proved otherwise. The ratio for diagnosis of appendicitis in children before rupture has occurred is about one in seven.

Goldsmith¹⁰ and Lewin¹¹ point to an extremely high mortality rate in elderly persons and rely on early diagnosis to lower this rate. Early rupture is the rule and this is probably due to

fibrous tissue substitution rendering the appendix less distensible.

In the aged, the signs are not typical, there is less temperature, pain is not as acute, all visceral processes are considerably slowed, constipation is the rule, there is more general abdominal distention and the history is misleading. It is the duty of the physician or surgeon to advise the aged of the advantages to be gained from early surgery and insist on this form of treatment.

Another point I wish to call to your attention in this group, which would reduce the mortality rate, was brought out by Morley¹² in differentiating the two pains in appendicitis. The initial pain is entirely different in character and in its manner of origin from the pain which occurs later in the right lower quadrant. This initial pain is felt in the center of the abdomen and the patient may refer to it as in the middle, at or above the umbilicus and he often describes it as "all across." The pain is like an ordinary belly-ache but more severe and usually griping in character. This pain is entirely unassociated with any tenderness on palpation and the patient may press on his abdomen to secure relief, a thing he never does when the second pain appears.

The second pain appears in the right lower abdominal quadrant and is entirely different in character from its forerunner. It is localized, severely at first, to the right side. It has a sharp or stabbing character, any movement of the abdominal muscles, as in deep breathing, vomiting or coughing, accentuates the pain and the right lower quadrant becomes exquisitely tender on palpation. The patient no longer writhes in pain but lies still in bed, resisting any movement and complains of the slightest pressure.

If we remember that pain is always the first symptom and recall the sequence of other symptoms, this will aid in the early diagnosis.

II. OPERATIVE FACTORS

In this group of factors are many that increase the mortality rate and are all under the control of the surgeon. The mortality from this disease decreases with the experience of the surgeon and it is here that his surgical judgment and technique play a most important role.

Next to delaying an early operation, I think, should come the incompetency of the occasional operator in dealing with difficult complications that arise in advanced appendicitis. This fact is further borne out by lower mortality rates of

the European countries where the work is concentrated in the larger clinics.

The first responsibility falls on the surgeon in selecting the type and site of the incision. I think that the majority of surgeons believe, as Deaver, that "a lateral approach, closely following the right lateral wall of the abdomen should be employed" and for this I strongly favor the McBurney incision or some of its modifications. Pus can be aspirated as soon as it appears, adhesions are least disturbed, a dirty appendix is not drawn over coils of uninvolved small intestines and pus is not spread by sponging over uncontaminated peritoneum.

After the abdomen is opened, it should be remembered that unnecessary trauma increases the mortality. That the appendix should invariably be removed regardless of the pathology is an erroneous idea. It is poor judgment and reckless surgery to search for an appendix whose stump is buried in an abscess surrounded by inflamed adherent intestinal loops. This procedure only serves to break down Nature's intra-abdominal defenses and to spread the infection, a procedure, as Grey Turner correctly says, "not to be in the category of surgery."

Indiscriminate drainage of the peritoneal cavity contributes to post-operative obstruction and mortality. Most surgeons of today agree that to drain the peritoneal cavity after appendectomy, when only a cloudy protective fluid is found, inhibits the defense reaction of the peritoneum. In such cases, the patient makes a better recovery when the abdomen is closed tightly and obstruction is much more frequent in drained than in undrained cases. The old saying, "When in doubt, drain," is a lazy attitude and should be condemned.

III. POST-OPERATIVE FACTORS

The last factors, the post-operative, are like the operative, in that they are entirely in the hands of the surgeon. To reduce the mortality by post-operative treatment demands the same careful attention and observation as does the operative measures.

The failure on the part of the surgeon to treat dehydration, which has been caused by vomiting before and after operation, is a factor which contributes to the increased rate. This condition may be treated by the giving of fluids intravenously, under the skin and per rectum. In the presence of peritonitis, no proctoclysis should be employed as it has a tendency to increase peristalsis. The giving of a purgative post-opera-

tively can not be too strongly condemned, being in my mind, one of the chief factors causing post-operative mortality. Those post-operative cases, whose intestinal tract is verging on the condition of paralytic ileus, may easily have this condition produced by purgation.

Early recognition of post-operative complications of paralytic ileus and mechanical intestinal obstruction, will, with the institution of proper relief measures, result in a decrease of the mortality rate.

In those cases where the appendix has not been removed, it is the duty of the surgeon to inform the patient that the appendix has not "sloughed or rotted off" and that further operative measures to remove the appendix are desirable. Failure to inform the patient of the true condition delays matters in a later attack until the onset of peritonitis.

Finally, I believe that we should recall what Murphy of twenty years ago said, "That instead of it being time to stop talking about appendicitis, it is time to begin talking about it and talking more emphatically and seriously about it."

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DISCUSSION

Dr. George W. Richardson, Jacksonville:

Undoubtedly, the preoperative factors still furnish the paramount reason for the general

mortality rate of appendicitis. But to what extent they are responsible for the recent yearly increasing mortality rate, which constitutes the main theme of the doctor's paper, is debatable. Surely, you gentlemen will concede that the average layman seeks medical advice about "belly pains" much more promptly now than he did, say, ten or more years ago. You must not, however, interpret that statement as an endeavor on my part to belittle the pressing need for a continuation of organized effort by the profession to further educate the public in these matters.

Continuing this discussion, no one can deny that the failure of an early diagnosis by some general practitioners has yet to be charged as one of the main factors in the general mortality credited to this disease. But here, again, I am in doubt as to the extent to which it is guilty in the yearly increasing rate emphasized by the doctor. Certainly, it can be claimed, without hope of successful contradiction, that the early diagnosis of appendicitis by the general practitioner has steadily improved during the past decade instead of retrograding. That statement, nevertheless, is not offered as a defense in behalf of the careless or ignorant doctor, but presented in a frank attempt to evaluate the real status of this factor as to its bearing on this recent increasing mortality.

Strange as it may seem in this enlightened age, some of the general mortality still can be charged against those surgeons who continue to adhere to the so-called "expectant plan" of treatment. The bearing of this particular factor, though, on the mortality of appendicitis has decreased so decidedly during the past decade that it almost can be eliminated. The part, therefore, that it now plays in the present yearly increase is hardly worth discussing.

Time forbids my launching out into any general discussion of this most interesting problem. And, of course, I have no single formula to offer you as a specific for this alarming condition so forcibly brought to our attention by this paper of Dr. White. I intend, however, to try and emphasize the doctor's subject by mentioning two matters that I believe do have a special bearing on this increasing yearly mortality rate.

In the first place, I can't help but feel that both the improved standards of medical education and the more stringent requirements demanded by our national mortuary bureau have played a part in the statistical increase because of the simple process of the increased numbers of recorded

cases. In the second place, while I agree with Dr. White in charging some of this recent increase to the "occasional operator," I wish to go a step further in stating my belief that a much larger percentage can be laid at the door of the "insufficiently trained operator." It is common knowledge that the average medical graduate, who has served a one year's internship, is quite willing now to undertake an operation for appendicitis. Certainly, this scientific body is not going to question the grave risks involved in practice such as that.

In conclusion, I admit that it is quite easy to stand here and state facts that are familiar to all of us and which no one here attempts to deny. The important thing is, whether or not I have some solution to offer as a cure for this evil? My reply to that question is that whenever all of our standardized hospitals see fit to adopt more rigid requirements for the surgical privileges of their institutions; when those requirements are exactly the same for all of them; and furthermore, when they conscientiously require all doctors to submit adequate evidence as to their rights to be granted such privileges, then, and not until then, can a satisfactory solution of this alarming situation be hoped for.

Dr. J. W. Snyder, Miami:

Unfortunately, I have nothing new to offer on this subject. We have been discussing appendicitis for nearly forty years, and it is still a vital subject.

Education of the public is apparently the one thing to which we should pay attention. The education of the individual and the family by the physician is the most logical solution. Personal contact is more important than other means of publicity.

I recall an instance in which one individual in a very large family received the usual treatment, castor oil, etc., and barely escaped with his life. The parents of this family were educated by the physician as to what should not be done. As it happened, three or four other cases of appendicitis arose in that same family and toward the last the diagnosis was made by the family itself and the doctor called to operate. People can be taught that pain in the abdomen is not something to be treated by purely home remedies.

Our own responsibility of course lies in making an early diagnosis. It is probable that if every case of appendicitis could be operated upon in the first few hours we would rarely have a

death, and such deaths would be largely due to accident. We have from Morrison, I think, a definite criteria—that pain in the abdomen should always be regarded as appendicitis until proven to be otherwise. If we bear this in mind we probably will make few mistakes.

Murphy's suggestions are worth remembering. His succession of symptoms are: first, pain; second, nausea and vomiting; and lastly, abdominal rigidity, practically always with constipation. Pain combined with diarrhea of course very largely rules out the appendix.

The blood count is also of great importance. We all recognize its value. But if the blood count does correspond to the clinical picture as we see it, the blood count should be disregarded. We have all seen gangrenous appendices with leucocyte counts of seven or eight thousand. The leucocyte count is not an absolute criterion.

Now regarding the operation: we will save more people if we operate early with a questionable diagnosis than if we wait until every diagnosis is absolutely certain. When we do wait we are going to lose cases. It is really better to operate on an occasionally innocent case than to let an urgent case go uncared for. As to the operation itself, appendectomy, is something, as the previous speaker has stated, that any hospital interne feels perfectly capable of handling. You and I know that appendectomy may be the simplest of procedures or one of the most difficult problems in the whole realm of surgery. We have all seen masters of surgery spend an hour or more struggling with an appendix. Therefore, any man who enters the abdomen should be prepared to meet any situation and not simply be able to handle the easy case.

While it is true that an appendix should be operated upon where and when found, with our present hospital facilities and men of ability more patients will be saved if they can be gotten into proper institutions and proper hands.

As to the post-operative treatment: simplicity should rule. It seems well to consider each case as serious unless it is known definitely to be a clean case. Where there is the slightest contamination or infection the patient should be treated as though peritonitis were already present. Omit liquids by mouth for twenty-four to forty-eight hours, but give adequate fluids under the skin and by the intravenous route preferably combined with glucose. Use sedatives to give the patient rest and do not do much else.

I would like to compliment Doctor White for

bringing up this very old but very live subject before our association.

Dr. F. J. Waas, Jacksonville:

I am sorry that I did not hear Dr. White's paper, but I could not help but be interested in what Dr. Richardson said relative to raising the standards of our hospitals regarding the handling of these acute surgical conditions. We are all concerned with that, because we see this picture so frequently. In our own community we have been working for a long time on a program relative to raising the standards of our hospital institutions in Jacksonville. And it is very hard to handle.

Young men, of course, feel that they are qualified to do these abdominal procedures when they present themselves. And they get into the abdomen and are very often lost. It has been a very serious procedure with us to handle.

Relative to the education of the public: The public has been markedly educated in the past few years relative to attacks of appendicitis. In our community we frequently hear mothers say, "Doctor, my child has a pain in the abdomen and I am afraid it is appendicitis." We are working and I really think we are getting somewhere. Doctor, I want to thank you for bringing that one point up.

Dr. Eugene G. Peek, Ocala:

Many of us who are associated with hospitals are drawing from the doctors doing country practice. This is no reflection on the doctor that lives out twenty-five or thirty miles from a hospital. The majority of our deaths in our hospitals are due to getting the patient too late. In educating the public as to the symptoms of appendicitis, also establishing a more friendly relation between the doctors in town that are associated with hospitals, would be one way of solving this problem. We find that the man out fifteen, twenty or thirty miles in the country is a little envious of the doctor he has to take his patient to in town as he feels like he loses the patient. If we can establish a little more friendly relationship between the doctors in the hospitals and the doctors in the rural communities, this would be one way of solving this question.

Dr. Ralph Gowdy, Miami Beach:

This question certainly is not a dead subject, and there are one or two points which I think should be emphasized.

There is a definite increase in deaths caused by appendicitis. By this I do not mean just a

greater total of deaths due to appendicitis, but a percentage increase. More people in every hundred thousand of population are dying from appendicitis today than was the case thirty years ago. The cause of this increase in frequency of appendicitis along with the increase in deaths from appendicitis is hard to determine. In my opinion the lack of walking in this country is one of the factors. Walking helps to prevent constipation and I believe constipation is the most important predisposing cause of appendicitis. The use of automobiles in this country has almost done away with walking and the increase in appendicitis has coincided with the increased use of automobiles. In those countries where automobiles are less common there has not been the marked increase in appendicitis.

I believe home treatments, given before the surgeon sees the patient, are responsible for most deaths from appendicitis. It is my contention that an ice bag should never be applied to a painful abdomen before a diagnosis has been made. An ice bag applied over an acutely infected appendix will often relieve the pain for several hours and may allow gangrene or pus to develop before a surgeon is called. The other most common mistake made in home treatment is the giving of cathartics to those suffering with acute abdominal pain. If we could induce the public to give an enema, during the first few hours of acute abdominal pain, instead of giving castor oil, many lives would be saved. It is quite natural that most people will try some home method of relief before calling a doctor. Therefore, I think we should urge them to give only an enema and in case relief is not obtained to call their doctor. An enema given in cases of acute abdominal pain before the doctor arrives will often aid him in making a correct diagnosis and will seldom do any harm if given during the first few hours after the onset of pain.

Dr. Herbert E. White, St. Augustine (concluding):

I wish to thank Drs. Snyder and Richardson, also the other gentlemen, for their most able discussions; also the doctor who just brought out the point about the ice cap. Dr. Chalmers Da Costa has been a staunch supporter of this point for a number of years and he advocates the use of a hot water bottle in preference to an ice cap. I think we use the ice cap too much and believe it would be better in many instances if we left it off.

SOME DISTURBANCES OF THE THYROID GLAND*

HUGH WEST, M.D.,

DeLand.

The study of disturbances of the thyroid gland and of the symptoms arising therefrom is one of great practical and academic interest. One has only to study the literature a short time to learn how many theories as to the causes of these disturbances are advanced. Some are correct as proven by the advancement of thyroid surgery since the discovery of the active principal of thyroid tissue, namely, thyroxin, by Kendall in 1922 and the introduction of iodine therapy by Plummer soon afterward.

In order to save time and to avoid becoming too technical I will confine my remarks to a general discussion of hyperthyroidism, hypothyroidism and thyroiditis, reviewing some cases that I have had that bring out the points I wish to stress.

Hyperthyroidism may be defined as that condition which exists when there is an excess of thyroxin containing colloid circulating in the blood stream and fixed in the body tissues. The following case is one of hyperthyroidism of the exophthalmic type.

Mr. H. W. G., white, aged 39, was referred to me on August 26th, 1930, for the purpose of filing a claim against an insurance company for total disability benefits on the grounds of diabetes. He was 5 feet 7¼ inches tall, weighed 114 pounds—pulse rate was 160. Past history was negative and there had been no injury nor emotional shocks. He was born in Arkansas and had lived there and in New Mexico all of his life. There was no family tendency to any disease.

He dated his illness from two years previously when he began to lose weight and strength, did not sleep well, became irritable, consulted a physician who found that he had sugar in the urine. He was instructed to follow a diabetic diet. The loss of weight and strength became steadily worse and he was finally given insulin. There was one doctor out of six who had suspected hyperthyroidism and had a basal metabolic rate determined but the patient knew nothing of the result. Surgical operation was not discussed with him and he was not given iodine. On asking him if he noticed his weakness on climbing his reply was

*Read before the Pinellas County Medical Society, February 3, 1933.



H. W. G., weight, 114; basal metabolic rate plus 75; pulse, 140-160 per min.; glycosuria—note the absence of goitre.

that for the past few days he had had to crawl upstairs. He was very cross toward his family, which was unusual for him.

On physical examination, exophthalmus, lid lag and a staring expression were most pronounced. The thyroid was barely palpable, small, smooth and firm. No enlargement was detected on palpation. Bruits were heard anywhere on the anterior surface of the neck. The heart was moderately enlarged to the left. The great vessels in the neck were pounding at the rate of 160 per minute after being quiet in a recumbent position for thirty minutes. Blood pressure was 110/60. There was a fine rapid tremor of the outstretched fingers. The fingernails were slightly clubbed, equally on both hands. The skin was loose and flabby. The remainder of the physical examination was essentially negative. The urine was negative except for sugar in a good quantity. The blood count was: red blood corpuscles, 4,100,000; hemoglobin, 80%; white blood corpuscles, 9,600; polys, 54%; small lymphocytes, 42%; large lymphocytes, 4%.

It was obvious that the man was desperately ill with hyperthyroidism and close to the dangerous thyroid crisis.

I instructed him to go home and to bed, take 10 drops of Lugol's solution every four hours, eat liberally and drink lots of water.

On the following day his pulse was 140 per minute; he had had some sleep and felt much better. On the third day his pulse was 126 per minute; he had no sugar in the urine; he was feeling and looking much better and the basal metabolic rate was plus 75 (did not determine this sooner on account of his extreme condition). I reduced the Lugol's solution to 8 drops three times a day. On the 12th day his pulse rate was 112, basal metabolic rate was plus 58. He was on a very liberal diet and was sugar free. In another two weeks his pulse was 90 per minute and the basal metabolic rate was plus 26. He remained sugar-free.

I now decided he was improved sufficiently to undergo at least resection of one lobe of the thyroid and consequently on October 6th, we operated on him with novocaine anesthesia and



Same patient three months after partial resection of both lobes of thyroid. Weight, 145; pulse, 80; basal metabolic rate plus 4. Glycosuria entirely disappeared after one week of Lugol's solution.

happily were able to resect both lobes and isthmus leaving only enough tissue to guard the recurrent laryngeal nerves and the parathyroids. There was very little post-operative reaction and he was allowed to go home in five days.

In three months' time he gained thirty pounds. His pulse remains around eighty per minute and he is able to work and enjoy health.

When one waits for the patient to write his own diagnosis with his staring eyes, rapid heart action, loss of weight, tremor and nervousness, the so-called cardinal symptoms, he has greatly increased the risk that the patient and surgeon must take in order to effect a cure.

Statistics from the larger goitre clinics show that exophthalmic goitre is on the increase. At the Mayo clinic during the last five years the percentage increase of exophthalmic goitre has been over 100%. Emotional upsets, worry, etc., take their toll and it behooves each of us to be on guard and recognize these cases early.

The early symptoms are easily overlooked. They may be loss of weight, glycosuria, cardiac and gastric upsets, diarrhea and emotional instability, profuse sweating, intolerance to heat: either one may occur separately and apart from others. Exophthalmus and a noticeable increase in the size of the gland are absent in 50% of the cases and unless the physician has hyperthyroidism in mind and only rules it out after repeated metabolic tests and observations, he is sure to miss a good many cases.

We should differentiate between exophthalmic goitre and adenomatous goitre with hyperthyroidism. Toxic symptoms in patients with adenomatous and nodular goitres develop usually about twelve to fifteen years after the development of the goitre. Iodine should not be given to these patients except as an aid in establishing the diagnosis. Adenomatous goitre patients with hyperthyroidism do not respond to iodine but are made worse. The treatment of both types is surgical. Adenomatous goitres without hyperthyroidism should also be removed to safe-guard the patient—when they become toxic the risk is increased.

Equally as difficult of diagnosis, if not more so, is hypothyroidism. I do not refer to the text book picture of myxedema with the patient with her thickened skin, pallor, sluggishness, gain in weight, indigestion, melancholia and a basal metabolic rate of minus 30 to minus 50. It is the border line cases that need the most help for

they have not yet reached such a low ebb but that they can still appreciate their state of health and grasp the idea that something is seriously wrong.

We, as surgeons, in our zeal to locate patients on whom we may perform surgical operations not infrequently find the patient for whom we have made a tentative clinical diagnosis of hyperthyroidism to have just the opposite: indigestion, nervousness, crying spells, inability to concentrate, weakness, tachycardia and even a loss of weight may be due to hypothyroidism.

Mrs. J. G. D., age 39, consulted me on October 31, 1932. The chief complaint was severe headaches accompanied by nausea and vomiting, lasting usually two or three days and recurring at intervals of two to six weeks. In addition to this was a complaint of fatigue on the least exertion. The patient who formerly enjoyed and played a good game of golf would become exhausted after playing only a few holes.

The family history was negative. Past history revealed bilateral salpingectomy and appendectomy eighteen years previously. There were no injuries, other operations or severe emotional strains. The present illness dated back for over ten years, especially the persistent headaches as described above. The fatigue symptoms had been much worse for a year. For a year the patient was easily upset and cried easily. She had taken intravenous injections of iron and other substances and ovarian extract but without any definite improvement.

Physical examination revealed an intelligent personality; hair fine and rather brittle; skin dry and sallow; no positive eye changes; thyroid apparently normal; blood pressure 124/80, pulse 100, temperature 98. The remainder of the examination was essentially negative.

Blood counts were well within the range of normal—urine, stool and Wassermann were negative.

The basal metabolism was minus 25. She was given eight grains of thyroid extract daily. In two weeks she complained of some pounding of the heart. The rate was unchanged—100 per minute. Basal metabolism at this time was minus 15. Eight grains daily were continued. A sedative was prescribed. In another two weeks the pulse was down to 80. The patient was feeling better. Very recently she stated she feels better than she has in many years and has had only one headache of any consequence.

This case illustrates one of many patients that

go from doctor to doctor seeking relief from "a general tired feeling and nervous headaches." The decrease of the heart rate in this case is most interesting.

In colloid goitres of puberty or the so-called adolescent goitres, in the goitres of pregnancy and in many of the large cystic goitres we are often dealing with hypothyroidism. There is a theory, and it is plausible, that eclampsia is occasioned by hyperthyroidism and so are some premature births.

Therefore, much is to be gained in a wide range of patients from studying the cases from a metabolic viewpoint. I am not aware that it is common practice to determine metabolic rates of pregnant women with what has been wrongly called physiologic hypertrophy of the thyroid. The condition is not physiological but pathological. Study of the stained sections from this type of goitre shows an abundance of colloid with an enlargement of the acini and a flattening or hypoplasia of the secreting epithelium.

No doubt these patients would show evidence of hyperthyroidism if the amount of colloid that is stored in the thyroid gland were turned loose in the body tissues. Since it is stored and the secreting cells are more or less inactive, thyroid extract should be administered.

A rare disturbance of the thyroid is an inflammatory change. The onset is gradual in an apparently otherwise normal gland or it may occur in a gland in which there has been adenoma or colloid enlargement for some time.

Mrs. E. L. G., age 28, consulted me on March 27th, 1928. She had noticed a nodule approximately two centimeters in diameter in the thyroid for a year. She had lost twelve pounds in the past year, was extremely nervous, cried easily, and was upset by the most trivial things. She complained of a soreness, and a feeling of fullness in her neck. Her heart action had increased in rate and intensity until the pounding was enough to keep her awake at times. She had been advised that her thyroid was not the cause of her symptoms. The family history was negative for disease. There had been financial difficulties and some friction with certain in-laws. She had one child—aged five. Menstrual history was normal except for excessive amount during past year.

On examination I found a nervous, frightened woman, determined that I should find nothing wrong with her. She weighed 102 pounds, was

5 feet 8 inches tall. There was not definite lid-lag nor stare; the palpebral fissures were wider than normal, giving the appearance of moderate exophthalmus. The outstretched fingers showed a fine tremor. Heart was normal except for rate of 116. Blood pressure was 98/60. The reflexes were exaggerated. The thyroid was of firm consistency, moderately enlarged and irregular in outline. There was one distinct nodule about two centimeters in diameter in the right lobe. The usual examination of the thyroid did not seem to cause any undue pain.

The remainder of the examination was essentially negative; blood counts and urine analyses were normal. Three basal metabolic tests were made under four and five-day intervals and were plus 51, plus 33 and plus 32. A diagnosis of adenomatous goitre with hyperthyroidism was made and a partial thyroidectomy advised. Operation was refused. I then advised her to rest, not worry and cautioned her against becoming pregnant. We gave her small doses of iodine while here but it had no effect on her, was discontinued and advised against.

She returned home in a short time, soon became pregnant and came near dying in the latter months of the pregnancy from nephritis and complications with her heart.

She came back to me on June 18th, 1931, having lost eight more pounds. The interesting thing about the patient at this time was the decrease in the size of the gland as a whole but an increase in the size of the adenoma. The metabolic rate at this time was plus 18. Her heart rate was 120 per minute. This slowed down to 90 per minute after a week of bed rest and sedatives.

On June 27th, 1931, I removed approximately two-thirds of each lobe of the thyroid. The patient's recovery was uneventful and she was allowed to leave the hospital in nine days to continue a regime of rest and mental relaxation.

The pathologic report was hyperplastic goitre with moderate hyperplasia and chronic thyroiditis.

A recent communication from this patient states that she is much improved in health, particularly the nervous symptoms, and a gain in weight of ten pounds.

The entire gland may be involved in thyroiditis causing an enlargement, the function is disturbed, usually being overactivity. This case illustrates this very well. Nearly two years before coming to operation the basal metabolic rate was plus 55 at the highest reading. My diagnosis at this time was adenomatous goitre with hyperthyroidism. Subsequent examinations, the behavior of the gland and the pathologic report have convinced me that she had inflammatory changes in the gland at the time of my examination in 1928.

I am not the only one that makes errors in diagnosing thyroiditis. Sistrunk says practically all correct diagnoses are made in the laboratory after the patient has been operated upon for hyperthyroidism. Some of the patients developed hypothyroidism following operation, but it is due to the inflammatory process and not the operation.

CONCLUSIONS

1. Cases representing three disturbances of the thyroid are reported.

2. Hyperthyroidism must be recognized early by repeated examinations. The "cardial symptoms," exophthalmus, tachycardia, nervousness and loss of weight are late symptoms. Eye signs are positive in only 50% of cases.

3. Hypothyroidism is more common in Florida than hyperthyroidism—goitres of pregnancy, puberty and of the large colloid and cystic types may be hypothyroidism. Basal metabolic rates should be done more often on these cases.

4. Thyroiditis is rare—it simulates hyperthyroidism and is difficult of diagnosis. The treatment is surgical as it is impossible to diagnose usually.

5. Thyroiditis is often followed by hypothyroidism.

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PYURIA IN INFANTS AND CHILDREN.*

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I have chosen the general subject of "Pyuria in Infants and Children" because it is an everyday ordinary subject with most of us, and it occasionally does us good to review the common diseases and to discuss the newer ideas on their treatment.

About one per cent of all cases seen by the pediatrician are cases of pyuria.

Pyuria means pus in the urine. It may exist as an acute or as a chronic condition. It may come from any part of the genito-urinary tract, the kidney or its pelvis, ureters, bladder, vagina or prepuce. Rarely, it may come from an outside source—such as the opening of an abscess from a perinephritis, an appendicitis, or caries of the spine into the urinary tract.

In the normal *uncentrifuged* urine obtained from boys, there are not more than two or three pus cells in the low power field; from girls, not more than six or eight cells in the low power field. (Helmholtz.) An increase in this number is characteristic of pyuria. In the high power field, six or eight pus cells, generally associated with epithelial cells from the pelvis of the kidney or bladder, is necessary before we call it pyuria.

Before von Hutton Brenner's publication in 1876, pyogenic infection of the urinary tract in infants and children was practically unrecognized. In the recent decades, doctors have learned to examine the urine of infants and children. Now the emphasis placed on the presence of pus in the urine has often led to making the diagnosis of pyelitis on insufficient evidence. Some doctors call a case pyelitis whenever an increased number of pus cells are found in the urine. Even a large number of pus cells in the urine is not conclusive evidence of infection of the urinary tract. The pus may come from the vagina or prepuce.

Proper precautions in obtaining the specimen should be used. Mothers should be instructed to wash the external genitalia carefully before collecting the urine. I have had several cases in which the ordinarily voided specimen showed an increase in pus cells, but when the genitalia was carefully washed, the specimen was normal.

Even when evident pus is not present in the vagina, the irritation during febrile attacks is

*Read before Midland Medical Society, Tampa, October 27, 1932.

sufficient to add pus cells during the passage of the urine.

Helmholtz, of the Mayo Clinic, whom I will quote later, is considered the foremost authority in America on urinary infections of children. He states that before a diagnosis of pyelitis should be made, the specimen examined should be a catheterized specimen from male babies, and of girls of all ages. For older boys he requires that the foreskin be retracted, a small amount of urine passed and discarded, then the specimen caught. I do not urge catheterization as a routine for general practice for I believe there is danger of carrying bacteria into the urethra.

While pyelitis really means an inflammation of the pelvis of the kidney, most of us use the term in the clinical sense to mean an infection of the parenchyma of the kidney, the pelvis of the kidney, the ureters and the bladder. Pyelocystitis, pyuria and cystitis are used interchangeably—although many do use the term cystitis specifically.

The controversy over the origin of pyuria, whether it is a blood-borne infection or an ascending infection from the urethra is as about settled now as it was 10 or 20 years ago. In 1929, Wilson & Schloss published an excellent article, showing by their pathological studies that children dying with pyuria exhibited definite focal inflammatory lesions in the interstitial tissue of the kidney. It is their belief that the most common cause of severe pyuria in children is a suppurative interstitial nephritis, due to a blood-borne infection.

On the other hand, there are undeniable reasons to support the ascending route theory: (1) the fact that the urine of female babies shows a larger percentage of pyuria than that of boys; (2) the findings of urologists (as Hinman) that half the female babies subjected to cystoscopy show cystitis uncomplicated by involvement of the ureter and pelvis; and (3) that 90% of the urines cultured show colon bacillus.

Pyelitis is essentially a disease of the diaper period. Next to colds and gastro-intestinal upsets, it is the most common disease of childhood. Pyelitis may exist as early as the second day of life, as a case report of R. M. Smith records. I saw, in consultation, a baby boy, who in the third day had developed a temperature of 104, which receded the next morning, but rose again the afternoon of his fourth day. When I saw him physical examination was negative but an ex-

amination of his urine showed it heavily loaded with pus cells. Alkalines and water rapidly cleared off his fever.

The symptoms of pyelitis are varied—there are no definite clinical indications of the disease. In every fever of unknown origin in infancy a microscopic examination of the urine should be made, for a large percentage of them are due to infections of the urinary tract. One negative examination is not sufficient—they must be made repeatedly.

The typical case of acute pyelitis of children shows a moderate fever—sometimes an alarmingly high fever—pallor, restlessness, and frequently vomiting. Sometimes severe cases with convulsions and rigidity of the neck simulate meningitis. The frequent association of vomiting and diarrhea may be called colitis until the examination of the urine reveals the true cause.

Occasionally the older child shows local symptoms, frequency, pain in kidney region. But as often there may be general abdominal pain, which with vomiting and moderate fever may be hard to differentiate from acute appendicitis.

Another type of onset is that accompanying the upper respiratory diseases—tonsillitis, otitis, bronchitis. The prolonged temperature after the subsidence of local signs leads to a search for the cause—and pyuria is discovered.

The diagnosis of pyuria is made by the examination of the urine. But, according to Helmholtz, "It is essential also to know the nature of the infecting organism. The presence of streptococci or staphylococci is presumptive evidence that the kidney has been secondarily infected by way of the blood stream, and foci of infection in the skin, tonsils, ears and so forth should be looked for. The presence of the colon bacillus indicates that the infection is much more likely to be of the bladder or pelvis of the kidney. Enlargement of the kidney and illness of extremely severe course always indicate pyelonephritis. Absence of any growth after 48 hours on blood agar plates made from urine that contains pus, makes it necessary to exclude infection due to bacillus of tuberculosis."

"The presence of persisting infection cannot be determined unless cultures are taken at intervals to determine the results of treatment. Clinical cures, evidenced by freedom from symptoms and absence of pus from the urine are not sufficient. Diagnosis should be made by culture, and recovery should be controlled by culture."

TREATMENT

Pushing fluids is the most important treatment in pyuria. At least one quart of water should be given every 24 hours, more if possible. In most of the cases with fever water will be taken readily, but should the patient refuse to drink, there are many ways which may be used to get the necessary amount of water into his system: by the nasal or the stomach tube, by intra-peritoneal injections, by hyperdermoclysis, and by the intravenous route. Rectal administration by use of small amount (2 or 3 ounces) high in the sigmoid can be used in small children—and the Murphy drip *tried* in older ones. Many babies who refuse to drink water will take it by the teaspoon—and it is surprising how much fluid can be given by a persistent mother offering a teaspoonful of water every few minutes.

Alkalinization of the urine, together with pushing fluids, will control 80% of the cases of pyuria. How it works we are not certain. Formerly it was thought that the alkaline reaction of the urine killed the organisms, but experiments have proven that the urine of the body cannot be made so alkaline that it will kill the growth. Many observers think that it works through the diuretic action of the alkali and the neutralizing effect upon the acidity of the inflamed mucosa of the urinary tract.

Alkalines are best given in the form of soda bicarbonate and sodium citrate—in large enough dosage to make the urine alkaline. The dosage varies with the patient. A six months old child generally can take $7\frac{1}{2}$ grains each of the bicarbonate and citrate, 4 times a day. I generally use an effervescent form of soda in older children, giving one teaspoonful to a glass of water twice daily. After the urine is rendered alkaline, the amount of alkalies may be reduced—generally by one-half—and yet maintain its alkalinity.

Most acute cases of pyuria clear up clinically on the alkalinization, but we so often expect a flare-up later that many of us warn the mothers to expect a return of a little fever and a few pus cells. I believe that if we would take a culture, we would find that many of these urines still contain infective organisms, that we should not dismiss the case as cured until this culture is negative.

After two weeks or more of alkali therapy, if bacteruria or pyuria persists, then it is well to use one of the urinary antiseptics.

Hexamethylenamin—now called methenamine

in the new U. S. P.—has long been the drug of choice. It is sold as urotropin, formin, urisol, uritone, etc. Methenamine gives off formaldehyde in an acid medium, therefore it is useless to give urotropin with an alkali. Rather, we should render the urine acid by soda and phosphate, ammonium chloride, etc., before we give methenamine. Urotropin is often not effective, and a recent article by Helmholtz shows why we are not getting the results we should. Most of us use litmus paper to determine that the urine is acid. Litmus paper changes from blue to red at an acidity below Ph. 7.0. Helmholtz proved by experiments in broth and urine, that if the bacteria are to be killed within the time limit corresponding to the time the urine remains in the urinary tract (four to eight hours) that the acidity of the urine must be greater, the Ph. below 5.5, preferably around Ph. 5.0. If we use litmus paper, we cannot know that the acidity is great enough. However, methyl-red paper when dry has a yellowish color—and when placed in a solution whose acidity is Ph. 5.5 or below, it changes to a deep red color.

Helmholtz found that the best drug to render the urine acid enough (that is below Ph. 5.5) is ammonium chloride. His routine of administration of methenamine is: "Ammonium chloride should be given in increasing doses beginning with from 5 to 15 grains, 4 times a day, every six hours, the dose depending upon the age of the child, until the urine turns methyl-red paper a definite red. Then methenamine should be given in increasing doses, beginning with from 2 to 5 grains, 4 times a day. After 3 days' treatment, a culture of the urine should be taken. If sterile, the same dosage should be continued 3 more days and a culture repeated. If sterile, medication should be discontinued, and a 3rd culture taken after 3 days. If the urine is sterile this time, the patient has been freed of his infection." But—if there has been a positive culture, he doubles the dose—and if the cultures remain positive, "the rate of increase is continued until either the urine becomes sterile, or it is necessary to discontinue the use of methenamine because of the frequency and hematuria resulting from irritation of the bladder."

In these times of depression the large majority of our patients cannot afford these many cultures. But we can give increasing doses of methenamine—even up to the point of red blood

cells in the urine and take a culture then and preferably a second.

Hexylresorcinal is another urinary antiseptic that is used in chronic pyuria. It should not be used at the same time that alkalies and fluids are given; it is better to reduce the fluid intake while giving hexylresorcinal.

Pyridium and serenium are two new urinary antiseptics recently introduced. Walters in 1929 made great claims for the bactericidal action of pyridium, but Gillespie's studies of both these dye-drugs showed that they would likely be of little value in the treatment of infection due to the colon bacillus. Both of these drugs are still very expensive (even though their cost has been reduced to half in the past years). My experience with both is limited to a few cases, with no particularly brilliant results.

In the Mayo Clinic it has been shown that the ketogenic diet has curative effect upon urinary infection by rendering the urine highly acid. But the difficulties of preparation of this diet and its unpalatableness, makes it impractical in home treatment.

There still remains about 5 per cent of pyuria cases that are refractory to any form of medical treatment. This infection is generally dependent upon stasis, caused by some abnormality of the genito-urinary tract—a stone, a valve-like fold in the ureter or urethra, a diverticulum of the bladder, twisted, kinked or double ureters, horseshoe kidney, or double pelvis of kidney, etc. Bugbee, Courtin, Campbell and other writers have repeatedly called the medical attention to malformation of the urinary tract as a cause of chronic pyuria.

Generally, there are no special symptoms in these cases to suspect a malformation. The clinical picture is that of an acute or chronic pyuria, but the very fact that the pyuria persists under thorough treatments should excite suspicion of an abnormality.

If an acute case of pyuria persists five or six weeks or a chronic case over two or three weeks, call in an urologist. Many a case of pyuria has cleared up following dilation of the ureter, or the removal of a stone from the bladder. A competent urologist can now examine the urinary tract of a small baby with very little discomfort to the baby. An X-ray of the kidneys, ureters and bladder, cystogram, cystoscopic examination and pyelogram will reveal any abnormality. Early recognition of these cases and corrective surgical treatment is vital if these children are to be saved

from death which will eventually come from faulty kidney function due to infection of the urinary tract.

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A NEW METHOD OF TREATING FRACTURES OF THE LOWER EXTREMITY.*

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In preparing this brief paper it has been my purpose to discuss the well leg traction method and how we may apply it to our every-day practice. No originality is claimed for any part of the discussion, as I have simply tried to gather together here a few facts which will help us to quickly and easily make use of this new method of treatment.

In deciding upon any new procedure in either medicine or surgery two things should always be considered, first of all, what advantage does it offer over the old established methods of treatment and, last but not least, what advantage does it offer the patient.

In the treatment of fractures of the lower extremity there has recently been offered to surgery a new and novel method of dealing with these conditions, namely, the well leg traction method. This method is indeed the very essence of simplicity, since it does not depend upon a complicated system of weights for its effectiveness, but is a unit within itself, exerting its traction upon the injured leg by means of a cast upon the well leg.

It is a well-known fact that one of our greatest difficulties in the past, in dealing with fractures of the femur in aged persons, has been that the treatment has of necessity confined them to bed. In immobilizing the fracture we have of

*Read before the Marion County Medical Society, March 16, 1933.

necessity immobilized the patient as well. Our fracture apparatus has been designed primarily for the treatment of the fracture in question, with no thought as to the circulatory and pulmonary complications which frequently follow.

In the well leg traction method we have a safe and sure means of reducing the fracture and maintaining that reduction, and at the same time every provision is made for keeping the patient ambulant. On the second day he may be placed in a wheel chair or he may pull himself to a sitting position in bed without in any way disturbing the position of the fracture. In fact the patient can easily be turned over on his abdomen each morning for hygienic care of the back, thereby preventing the development of bed sores, and rendering his after care much simpler.

PROCEDURE

At the outset the patient is first given $\frac{1}{4}$ gr. of morphine to make him comfortable and to render as painless as possible the few necessary manipulations incident to the application of the splint and cast. A preliminary X-ray should always be made to determine just what type of fracture is present, and to determine if internal or external rotation, adduction or abduction will be necessary. If the patient is in a hospital I like to make use of the Hawley fracture table as this greatly facilitates the application of the cast and keeps the patient much more comfortable, although one does not even need to remove the patient from the stretcher on which he was carried to the X-ray room. After a thorough study of the preliminary X-ray, both lower limbs are washed and dried and all traces of dirt removed so as to prevent irritation within the cast. The first cast to be applied is upon the well leg and is applied in the usual manner, extending from the mid thigh to several inches beyond the toes. The foot should be placed at right angles to the leg and should be held in slight eversion. Care should be taken that the plantar surface of the cast is firmly reinforced so as to support the weight of the counter traction. Roger Anderson advises that holes should be cut in the cast to relieve pressure on the malleoli. The splint is then unbolted into its three major parts and the counter traction stirrup is then incorporated in the cast by means of a few turns of plaster bandage. After this our attention is directed to the fractured leg. The first procedure is the insertion of the Steinman pin. For this we use an

ordinary sterile tray containing 2% procaine, ether, iodine, alcohol for the skin preparation, 10 c.c. Luer syringe and needle, Steinman pin and handle, sterile sponges, gloves, and towels. The ankle of the fractured leg is then prepared and draped in the usual manner. The site of election for insertion of the Steinman pin is at a point two fingers' breadth above the internal malleolus. The skin and periosteum on each side is infiltrated with 2% novocaine and the pin is inserted without any drilling or preliminary skin incision. Sterile sponges are then placed next to the skin over the ends of the pin. This procedure is absolutely painless and one should not hesitate to quickly place the pin in position. The leg is then wrapped with cotton batting and the plaster cast applied including the toes and several inches beyond. The traction stirrup is then placed over the ends of the pin and the stirrup incorporated in the cast with a few turns of plaster bandage. After the plaster has firmly set the splint is then bolted together and the traction nut screwed down and correct alignment of the fragments obtained by either internal or external rotation of the fractured leg. It is well to remember that sufficient traction has been exerted when the lever arm is drawn down to a right angle to the longitudinal axis of the leg.

It is a good plan to recheck the X-ray findings on the next day so as to ascertain if more or less traction is required and if the proper degree of rotation has been secured. As to time of removal of pin, I quote from Anderson in the American Journal of Surgery: "The time of removal of the pin depends upon such factors as the age of the patient, the location and type of fracture and callus formation. In general the following schedule is adhered to: Fractures of pelvis, 4 to 6 weeks; fractures of neck of femur, 12 to 14 weeks; intertrochanteric fractures, 7 to 9 weeks; subtrochanteric fractures, 7 to 10 weeks; fractures of femoral shaft, 5 to 10 weeks; fractures of distal third, 5 to 10 weeks; fractured tibia, 4 to 12 weeks; operative cases, 6 to 18 weeks. After the patient has been removed to his home and X-ray pictures are no longer easily obtained it is a good plan to frequently check the leg for shortening or lengthening as the case may be. This measurement is made from the anterior superior spine to the internal malleolus, and is done after the openings are made in the casts. I have not seen this mentioned in the literature but I consider it worthy of mention.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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URINARY ANTISEPTICS

With the introduction of practically every new drug or product on the market there is almost at once on the desk of every practicing physician, as well as in all medical periodicals, convincing claims setting forth its merits and effectiveness. One might easily be led to believe that each was a panacea for a particular disease.

No one group of drugs has been any more successfully commercialized and "sold" to the practicing physician than the large list of so-called urinary antiseptics. The virtue of these drugs is determined largely by laboratory tests, principally upon animals, and not by clinical evidence obtained by the careful and scientific use of the drug with humans. The drug manufacturers being primarily interested in volume of sales with profitable returns advertise widely the laboratory evaluation of the product and it becomes the physician's role to determine, if he can, the actual value of material.

One avenue is open by which the profession and patients could be protected from this very obvious breach of honesty and oftentimes pure deception. That would be for the Council on Pharmacy and Chemistry of the American Medical Association to refuse to accept any products which have not been proven to be clinically efficient by carefully controlled laboratory tests *in vivo*.

A recent work on the subject of the relative efficiency of a few of the most widely advertised urinary antiseptics by Davis and Sharp tends to bear out the above statements. The conclusions reached by these investigators were determined by testing antiseptic samples of urine by culture before and after administration of the drugs to normal persons in their maximum dosage as calculated according to body weight. Their method of evaluation of each drug's coefficient of antiseptics leaves but little room for error. It is as follows:

Twelve normal individuals were selected and from each was collected a specimen of urine under aseptic conditions before administration of the drug. This specimen served as a control. The drug was now given and urine specimens collected at intervals of 2, 4 and 8 hours. Ten cc. amounts of each sample was transferred to each of two test tubes and immediately inoculated from 24-hour highly diluted broth cultures of colon bacillus and staphylococcus. The urine tubes were then incubated for 24 hours and a single loop from each tube placed in 10 cc. of

melted agar and plated. These plates were now incubated for 24 hours. By this further dilution the number of colonies noted on the plates would be even more accurate as to whether the bacterial growth had been killed, inhibited or allowed to grow and develop.

The drugs used were caprokol, pyridium, urotropin and acriflavine. The results were as follows:

1. Pyridium (dosage 6 grs. in capsules)—The bacteria grew in all the pyridium containing samples as well as in the control sample.

2. Caprokol (Hexylresorcinol) (dosage 10 grs.)—The drug proved to be practically inert in the 2 and 8-hour samples but exerts a definite antiseptic action in the 4-hour sample against both bacteria.

3. Urotropin (dosage 15 grs.)—Exerted a definite antiseptic action against both bacteria in all three (2, 4 and 8-hour) specimens of urine.

4. Acriflavine (dosage 3 grs. in gelatine capsules)—Killed both the colon bacillus and staphylococcus in all 4-hour samples of urine as well as in 50% of the 2-hour specimens and in 75% of the 8-hour specimens. The same dosage of acriflavine given in the form of shellac coated pills proved practically inert. An alkaline urine is essential for the action of acriflavine as a bactericidal agent.

In administering urotropin no drug to increase the urinary acidity was given.

The conclusions reached by these experimentations tend to show that in their maximum unit dosage:

1. Pyridium colors the urine.
2. Caprokol is a slight antiseptic in some cases.
3. Urotropin is far more efficient than the above two drugs.

4. Acriflavine, when given in capsules, is an efficient antiseptic against the colon bacillus and staphylococcus. When given in the ordinary shellac coated pills is practically inert.

Thus it is seen that the least commercialized drug in the group attains, from this evaluation, the highest degree of clinical efficiency.

FINANCIAL AID TO SOCIETIES

At the Sarasota meeting the Association voted to extend financial aid to county societies in the prosecution of certain malpractice cases. Frequently members and officers of county societies do not seem to understand how this ruling operates. The Executive Committee is bound to follow a certain procedure in all such cases

and in order that county societies receive this aid they must follow the rules laid down by the Association. The rules of procedure are as follows:

The State Association match dollar for dollar, cash deposited by component county societies with the State Association's treasurer, this cash to be used for medico-legal activities in said counties. The total amount put up in any one year shall not exceed 50% of the total state dues paid in by that Society during the year and in cash shall not exceed \$200.00 for any one year.

Each request for such financial aid shall be considered by the Executive Committee and no request shall be granted unless authorized by unanimous consent of the Executive Committee. Money received from any component society shall be set up in the State Association's books, with a like amount of the Association's funds, to the credit of that County society. This fund is to be under the jurisdiction of the Association's Executive Committee and no obligations are to be incurred against this fund without such obligations first being approved by the Executive Committee. Invoices of bills for such approved expenditures shall be filed with the Business Manager of the Association, covering items of authorized expenditures, and the Association's check shall be issued in payment thereof. No payment for expenditures can be made except by means of the State Association's check bearing the signature of the treasurer of the Association.

CURTAILING HEALTH AGENCY APPROPRIATIONS

"Suicidal" was the word recently used by Dr. Kendall Emerson to describe the cutting of government health department budgets to the extent of impairing their service. Dr. Emerson is the acting executive secretary of the American Public Health Association, and he spoke over the National Farm and Home radio network.

"The rule usually followed in effecting public economies is to make cuts where party or personal interests will suffer least," said Dr. Emerson. "Precious little attention is paid to the relative importance of the various functions of government, a great deal to the importance of the political neck upon which the axe of economy is to fall."

"We are all convinced that governments can be run on far less than some have led us to believe was necessary. Anyone who attempts to

check the rising tide of economy will meet with instant popular disapproval. But we must separate the essential from the non-essential. Above all we must have protection against the menace of epidemic diseases which holds in itself far more public danger than the peril that lies in unjust laws, fire and banditry, all combined."

Dr. Emerson deplored the fact that the nature of public health protection is such that the individual goes about his business oblivious of what it costs in brain, energy and skill. "The public health service spends little time on publicity," stated Dr. Emerson. "It's thoughts are bent on scientific, not political considerations. It is the least advertised of all our public services, yet it is the first of the fundamental necessities of government if we are to have healthy lives, happy homes, living children and grandparents in every family."

"The public health service wears no striking uniform, it does not break the slumber of the night with the clang of the fire patrol or the shriek of the siren. Yet without it modern life could not endure. Quietly and unobtrusively it goes about supplying the community with pure water uncontaminated with the germs of disease; it disposes of the city's waste and controls its smoke and dirt; it supervises milk and other foods and assures safety from the infections that such supplies may carry. Through the eternal vigilance of its quarantine it renders cities free from devastating plague, from typhus, cholera, yellow fever and the like. Never sleeping, it guards the child from diphtheria, scarlet and typhoid fever and other frequently fatal contagious diseases.

"Despite its vital importance the public health service has always been underpaid and understaffed. Yet its achievements have been beyond all praise. Had it shown extravagance or wastefulness comparable to that of other government departments it should submit without protest to the reductions inevitable in times of financial stress. But it has not laid itself open to the charge. On its merits it has the right to demand from all good citizens such generous support that its basic services shall remain unhampered.

"If we people but knew the risk of decreased health protection, we would approve reduction in every other department of government before allowing ourselves to be driven to the suicidal procedure of impairing the service that watches with unslumbering vigilance over our comfort, our health and our children's lives."

RADIO BROADCASTS, 1932-1933

The following broadcast was arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

FERMENTATION AND DISEASE*

EDWARD JELKS, M.D.,
Jacksonville.

Did you ever hear the story of fermentation? Do you know who discovered what fermentation is, and more important still, what this discovery has meant to the progress of medicine, and to the health of every human individual? Perhaps you do not realize that without the knowledge which the study of fermentation has given, we still would have no satisfactory personal hygiene or adequate sanitation or public health or, in fact, a correct explanation of what disease is. Consequently, there would continue to be such frequent repetitions of epidemics that it would be impossible for man to live in the congested society of today.

The oldest records of man show he knew that when certain vegetable or fruit juices were left under proper conditions, a change in them took place, which resulted in the formation of a drinkable substance, which very early was called wine. He further knew that the desirable wine did not always form, for instead of a palatable drink there sometime was produced a sour substance, vinegar. In Biblical times the man of the streets could appreciate the disaster that followed putting new wine into old bottles, since he knew that a mixing of the old with the fresh produced a gas which would burst the containers or else cause the new wine to spoil. He did not understand why these things occurred until scientific curiosity prompted a great mind to look for and find the explanation.

In the middle ages fermentation, putrefaction and chemical reactions accompanied by effervescents, were thought to be one and the same. The alchemist, who was the chemist of that period, devoted years of experimenting in the hope that through some process of fermentation, common metals could be converted into precious gold.

That such incorrect ideas of fermentation should have been held by thinkers of an age that

preceded the microscope is not surprising, for it was with this instrument that man first saw what composed the thing which brought about fermentation. While studying fermenting juices some 20 or 30 years after the invention of the microscope, a Hollander named Leeuwenhoek, saw through it myriads of tiny bodies. He and many subsequent observers considered them to be no more than inert granules. It was about 1839 when scientists generally accepted the truth that these yeast bodies were essential to the process of fermentation. Even then, they were thought to be without life and to cause fermentation in some vague inexplicable manner.

It was in this period of uncertainty concerning fermentation that Pasteur, the master scientist, proved fermentation to be a process whereby from sugar in solution, carbon dioxide gas, and alcohol were formed through the action of cells of yeast, which he stated were "a living thing just as you and I are." With the microscope he was able to see that when the proper yeast cells were present, the fruit juices to be acted upon were converted into good wine and when other bodies were present, the juices would develop into a sour solution or vinegar. Interestingly enough, when the wine turned out to be bitter or otherwise spoiled, he could see through the microscope rod-shaped bodies called bacteria. The important observation was, that, depending upon the kind of microscopic bodies in the solution, there would be made good wine, poor wine, or vinegar.

Then Pasteur made the practical discovery that should the solution be heated to a certain temperature, the undesirable microscopic bodies would be killed while the desirable ones would live on and continue their good work of making wine. The application of this discovery is the principle called pasteurization; that is, the killing by heat of disease-causing organisms without destroying the bodies which, if not disturbed, will multiply and bring about the desired type of fermentation in solutions, such as fruit juices, milk, etc.

While he still was engaged in the study of fermentation the French government requested Pasteur to investigate a disease of silk worms. It was destroying the silk industry which had been of great importance in France, since the days of Henry IV. He learned, by methods of study similar to those he had used in the observation of fermentation, that the cause of the silk

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, January 22, 1933.

worm disease was a microscopic parasite which appeared in certain stages of the silk worms' development. Measures were then taken to fight this intruder. The result was a saving of the silk industry for France.

An epidemic of chicken cholera brought Pasteur another opportunity to learn more about the mysterious workings of fungi and bacteria. Chicken cholera was causing a heavy financial loss to the poultry business of France. Besides finding the micro-organism causing this disease, Pasteur began experiments which initiated the present practice of giving immunity to human beings by the administration of vaccines and serum. While giving cholera experimentally to chickens, he noted that if the material used for the injection had remained in a test tube for a certain length of time, it would not cause the disease. In fact, the severity of the given infection was found to depend upon the freshness of the culture used. He further determined that animals which had been inoculated previously with doses of a weakened culture would not succumb to chicken cholera when they were given later a dose of fresh, virulent culture sufficiently large to infect the normal animal. Pasteur learned to produce immunity to chicken cholera at will, by injecting into chickens weakened and attenuated organisms.

The principle of immunity he worked out in more detail with anthrax. This is a disease occurring usually in domesticated animals and sometimes in man. It is characterized by a local lesion or sore and an infection of the blood. Already Dr. Koch of Germany had identified and isolated the definite organism causing anthrax. But for Pasteur seeing and knowing the organism that caused a disease was not sufficient. His desire was to discover how to fight disease. What he wished most earnestly was a method by which suffering could be lessened and health preserved. So, applying the principle of immunity, as revealed in the experiments with chicken cholera, Pasteur laid plans to test giving animals immunity to anthrax. For this he took fifty sheep. Half he let live their usual lives without disturbance and into the other half he injected, over a period of several days, a solution containing bacilli of anthrax whose strength had been diminished by the application of heat. Then an equal dose of virulent anthrax bacilli was injected into each of the fifty animals. In less than a week all the unvaccinated ones were dead of anthrax, while the

twenty-five who had been protected by vaccination were alive.

Strange it may seem that a man educated to be a chemist should be he who, by explaining fermentation, enabled France to maintain the lead in wine-producing countries; who, through the application of knowledge concerning microscopic parasites, should preserve for his nation a silk worm industry centuries old; who, by discovering and applying the principles of enforced immunity, should save millions of cattle and poultry, not only for his own land but for the whole world. And now this man Pasteur, the chemist, is to attack disease in man and to establish the principle of giving man immunity to disease. He selected for this investigation hydrophobia, a dreadful disease with a mortality of almost 100%. His every effort to isolate the specific organism that caused it was fruitless, but by microscopic studies he was able to show that the nervous systems, the brain and spinal cord, were the tissues primarily attacked by the infection. Therefore, these tissues were taken from animals who, unquestionably, had had hydrophobia. They were dried and a solution made of them to be used for injections to prevent and treat the disease. To the unending benefit of man this method of prevention and cure gave results sufficiently effective to establish forever the practice of giving immunity. Of course, since that time there have been improvements in the method of preparation and administration of vaccine and sera; nevertheless, the principle of their use is Pasteur's.

The good a man does in the world is not limited to his own individual efforts. Were this true our progress would be very, very slow. A man's greatest service is in establishing facts and ideas which stimulate others to work and investigate along the lines of his thought. Therein is Pasteur the master.

For, soon after Pasteur had begun the study of immunity, leaders in the medical world saw that his explanations of fermentation, based upon the action of microorganisms, would remake the science of medicine. Throughout the ages it has been the practice of medical men to use for the betterment of mankind, truths which have been discovered in any line of human endeavor. Therefore, it was to be expected that the new knowledge of microorganisms would be applied to medicine. Joseph Lister in England conceived the idea that since microorganisms caused fer-

mentation, perhaps the same sort of bodies formed pus in wounds. Even before Pasteur's time certain minute bodies had been observed in discharge from wounds. These were thought to be of no practical importance until Lister experimented. Lister concluded that if Pasteur could destroy by heat the bodies which directed the process of fermentation, it was equally possible to alter the formation of pus could some way be devised whereby these living organisms could be killed. Obviously, heat could not be used in the wound of man, so he adopted a chemical destruction of these bodies. For this purpose he used a weak solution of phenol or carbolic acid. His method was to kill bacteria in the wounds with dressings saturated with the solution. Such a dressing would also keep other bacteria from getting into the wound by way of the air. From this idea was born the knowledge of antiseptics and finally asepsis. Modern surgery was made possible by Lister's application of Pasteur's discovery.

While Lister was working in England there lived in Germany a country practitioner, Robert Koch, who saw the necessity of more definite knowledge about the organisms which were causing specific diseases. To study them, it was necessary to perfect a method of getting bacteria separated one from another. This problem he solved and by 1878 he had isolated and described six different organisms which are found in infected wounds. In 1882 he announced the discovery of the germ of tuberculosis, and in 1883 that of Asiatic cholera. His work was followed in rapid succession by that of numerous investigators, who discovered the organisms of diphtheria, erysipelas, pneumonia, etc. Nor is the investigation finished; for today hundreds of medical schools, hospitals, and private individuals are still trying to learn more and more about the cause and conduct of disease.

Man travelled a long distance before he understood the simple process of fermentation. He has suffered economically and physically and suffered even unto death, because he was ignorant concerning the invisible life about him. In man's progress from ignorance toward knowledge there is no greater leader than Louis Pasteur, who taught us the truth about fermentation and thereby laid the foundation for the modern understanding of disease.

CORRESPONDENCE

*From Dr. Henry Hanson, State Health Officer,
Jacksonville, July 25, 1933:*

TO THE EDITOR:

The following is a quotation from a letter to the State Veterinarian which I think is worthy of reproduction in the Journal of the Florida Medical Association:

"State Veterinarian's Office, Tallahassee, Florida.
Dear Sirs:

Is there any 'electronic' test or cure for Rabies?

My dog recently bit a neighbor in play, and the woman has had a blood test made by S. W. Love, D. O., of St. Petersburg. Dr. Love informs her that his 'electronic' tests shows 2/25 rabies and prescribes a series of electrical treatments for her."

It is just a repetition of misinformation which is disseminated by persons who lack scientific information and are misleading the people who seek proper medical aid. I am quoting a paragraph from the State Veterinarian's reply which shows, of course, sound judgment and what the present day knowledge is regarding the treatment and prevention of rabies:

"This office has no information relative to any electronic test or cure for rabies, the Pasteur treatment being the only recognized prophylaxis known to this office."

I suppose one might say the first paragraph quoted contains the elements of a shock.

(Signed) HENRY HANSON, M.D.

From Dr. Elmo D. French, Miami:

TO THE EDITOR:

To one interested in the subject, the masterly discussion of "Heliotherapy" by Dr. Nelson Black, associate editor of the Journal, in the editorial columns of the July Journal, is a most thought-stimulating article.

At the suggestion of Dr. Black the following comments are offered.

In discussing pigmentation, Dr. Black says:

"Pigmentation in excess is found naturally in colored races. It is probably entirely protective," etc.

Available information would seem to confine this single function only to that part of the pigment contained in the *non-reactive*, degenerated or cornified upper layers of the epidermis. Here the sole function of the pigment, as Dr. Black states, is as a screen which absorbs the caloric energy and when overheated a reflex vaso-dilatation results in sweating, which in evaporating induces a waste of calories.

That pigment confined in the living active cells of the mucous layer, the Langerhans' cells and

the germinal cells is deemed to have an additional very vital function.

This later pigment absorbs and integrates the radiant energy from the outside and transforms it into energy utilized by the protoplasm.

Finsen says, melanine absorbs the light radiations and utilizes their chemical energy.

Pigment then in the reactive part of the skin would appear to play a dominant role in the biochemical effects of radiation.

In his discussion of the second clinically appreciable phenomena "Erythema," Dr. Black says:

"The erythema, which is a latent response, is produced by the action on the nerve endings in the skin," etc.

The mechanism of this vaso-dilatation is a triple reaction as described by Thomas Lewis.

The most powerful vaso-dilating action is induced directly upon the capillary walls by the acid waste products of intracellular metabolism, the latter having been accelerated by the utilized rays.

These products reach the capillary walls via the system of epidermo-dermic exchanges.

The capillary walls are markedly sensitive to variation in the pH of the surrounding media, the lowering of which as in this case causes vaso-dilatation and would be preceded, in time, by a period of latency.

In addition, as stated by Dr. Black, there is a reflex antidromic action on the capillaries and arterioles.

Of the many useful concepts and suggestions in Dr. Black's article that which would seem to us the most timely and valuable is the repeated warning of the possibilities for harm in heliotherapy misapplied.

(Signed) ELMO D. FRENCH, M.D.

STATE NEWS ITEMS

Dr. and Mrs. Maximilian Stern of DeLand left the latter part of July for Frontenac, N. Y., for a two-months visit.

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Dr. W. C. McConnell of St. Petersburg has returned from attending clinics at the Elgin (Ill.) State Hospital.

* * *

Drs. Iva C. Youmans and C. P. Youmans announce the removal of their offices and laboratory from the Professional Building to 653 Southwest Second Street, Miami.

Dr. J. G. Lyerly announces the opening of his offices in Suite 422, St. James Building, Jacksonville, with practice limited to neurological surgery and neurological diagnosis as applied to neurosurgery.

For the past twelve years Dr. Lyerly has been associated as a partner with Dr. C. C. Coleman, Richmond, Virginia, in the practice of neurosurgery and oral and plastic surgery of the face. During this period of time he has been on the faculty of the Medical College of Virginia and up to the present time has been Assistant Professor of Neuro-Surgery in the School of Medicine and Professor of Oral and Plastic Surgery of the Face in the School of Dentistry.

He is a Fellow of the American College of Surgeons and a member of the Harvey Cushing Society. The members of the latter society are composed of neurological surgeons with a few neuro-physiologists, neuro-pathologists and roentgenologists. The purpose of the society is for the advancement of neurological surgery and organic neurology as applied to neuro-surgery.

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Dr. and Mrs. S. A. Shoemaker of Orlando left early in August for points in central Indiana and western Ohio. The trip will be a combined business and pleasure visit. They expect to return about September 1st.

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Dr. and Mrs. John S. Helms, Jr., of Tampa, announce the birth of a daughter, Nancy, on July 16th.

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Dr. and Mrs. H. J. Peavy of Ft. Lauderdale have returned from a vacation spent in Macon, Ga.

* * *

Dr. J. Knox Simpson and family motored from Jacksonville to Chicago the early part of August. In addition to visiting the World's Fair, Dr. Simpson visited clinics and hospitals in several northern cities, including the Mayo Clinic at Rochester.

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Dr. Raymond Graves of Miami sailed recently for Europe. While on the continent, Dr. Graves will spend considerable time doing special work in Vienna.

* * *

Dr. Elbert McLaury of Hollywood is spending several months doing special work in various hospitals in the east.

Dr. Anna A. Darrow of Ft. Lauderdale has returned from a trip to Chicago and Milwaukee. While at Chicago, Dr. Darrow attended the fair and at Milwaukee the meeting of the American Medical Association.

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Dr. Meredith Mallory and family of Orlando are enjoying a two-months vacation in the north. They expect to spend some time in Chicago before their return.

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Dr. Walter B. Guy of St. Augustine, while in Washington, D. C., to attend clinics, recently suffered a severe fracture of the skull and jaw. In alighting from a street car, he was struck by a passing truck.

* * *

Dr. A. B. Connor of Hollywood is spending a month in Chicago.

* * *

Dr. Aaron Z. Oberdorfer of Jacksonville has opened offices in the St. James Building. For the past two years Dr. Oberdorfer has been on the resident staff of the Duval County Hospital.

* * *

The following doctors have recently affiliated themselves with organized medicine through their county societies and the State Association:

Andrew G. Brown, Dunnellon,
Luther C. Fisher, Jr., Pensacola.

* * *

Dr. and Mrs. G. S. Osincup of Orlando left recently for a two-months vacation trip through the north. They will spend some time in Chicago and visit in Canada before their return.

* * *

Dr. A. E. Drexel of Palatka has opened an office in the Florida Power and Light Building at Hastings. Dr. Drexel will observe office hours in this new location on Monday, Wednesday and Friday of each week.

* * *

Dr. W. G. Miles of Chattahoochee, who for the past six years has been assistant physician of the Florida State Hospital, recently resigned. He announces opening of offices in Orlando where he will continue in his specialty of neuropsychiatry.

* * *

Dr. Kenneth Phillips of Miami has returned from a tour of the western cities and is now located in his new suite of offices at 609 Huntington Bldg.

Dr. B. L. Whitten of Miami is spending his vacation in the north. Traveling by motor, he will visit several of the larger western cities, spend some time in Canada, and visit the fair at Chicago before his return.

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Dr. R. H. Stovall of Ft. Lauderdale recently returned from Macon, Ga., where he was called on business.

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Dr. Marvin Smith of Miami has been spending some time in London, England. He expects to return the early part of September.

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Dr. Homer L. Pearson of Miami announces the removal of his offices from 1605 Biscayne Blvd., to the Huntington Building.

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Dr. John C. Turner of Miami has returned from an extended fishing trip in the Bahamas.

* * *

The Central Florida Medical Society met in regular semi-annual session at Hotel Marion, Ocala, July 21st at 7:30 p. m. Members and guests from Alachua, Marion and Lake counties were in attendance. After dinner and some entertaining features, the following scientific program was enjoyed:

"Myocardial Ischemia", W. C. Blake, Tampa.
"Treatment of Acute Epididymitis," J. C. Vinson, Tampa.

"The Doctor From the Prosecuting Attorney's View-Point", A. B. Buie, State Attorney, Fifth Judicial Circuit.

At the business session, the following officers were elected:

President—Leroy H. Oetjen, Leesburg
Vice-President—J. L. Chalker, Ocala
Vice-President—S. C. Wood, Leesburg
Vice-President—E. H. Andrews, Gainesville
Secretary-Treasurer—R. H. Williams, Eustis

Gainesville was selected as the next place of meeting.

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Dr. C. Kirby Smith of Miami recently spent a short vacation in South Carolina where he visited his mother.

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Dr. Ralph B. Lingeman of Ft. Lauderdale recently returned from a visit in Indianapolis.

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Dr. E. Sterling Nichol of Miami has returned from a trip to Washington, D. C.

Dr. W. M. Rowlett, secretary of the State Board of Medical Examiners, makes the following announcement:

At the examination conducted by the State Board of Medical Examiners on June 12th and 13th at Jacksonville, there were forty-three applicants. Of these, one dropped out after the first subject, two failed and the license of one is being held up pending further investigation. Licenses have been granted to the following:

Adams, Daniel M., Jr., Panama City
 Alexander, Morris J., Highcoal, W. Va.
 Bearce, Herbert W., St. Augustine
 Benson, Arthur B., Jacksonville
 Bird, Terry, Carlisle, Ky.
 Blount, Robert E., Ft. Lauderdale
 Borland, James L., Ocala
 Bowman, Robert N., Pittsburgh, Pa.
 Buttice, Gaetano T., Chicago, Ill.
 Carpenter, George K., Nashville, Tenn.
 Clarholm, Victor, Arlington, N. J.
 Croft, George W., Charleston, S. C.
 Davis, Thos. H., St. Petersburg
 Ebert, John W., Towson, Md.
 Elsen, Matt, Winnebago, Ill.
 Ferrante, Gaetano C., Tampa
 Fessey, Ray O., Nashville, Tenn.
 Findley, Cleveland W., Vidalia, Ga.
 Hart, Dean W., Hollywood
 Haynsworth, Josiah E., Alachua
 Jaquish, Charles J., New Castle, Pa.
 Lancaster, Lamar L., Bartow
 Leiske, Samuel W., Orlando
 Lyerly, James G., Richmond, Va.
 McClure, John G., St. Petersburg
 Melvin, Perry D., Milton
 Owen, R. Wynn S., Indianapolis, Ind.
 Pumpelly, William C., Ft. Pierce
 Schnauss, Fauntleroy H., Cecil, Ga.
 Schoolman, L. Robert, Cumberland, Md.
 Shahan, John, Gadsden, Ala.
 Smith, Clarence M., Tampa
 Sory, James R., Nashville, Tenn.
 Vandiviere, Stuart P., Starke
 von Lehe, John A., Pensacola
 Weaver, William N., Jacksonville
 Wiley, Jas. B., Tampa
 Williams, Jack K., Ft. Myers
 Wood, Evans B., Atlanta, Ga.

* * *

Dr. F. S. Skiff and family of Ft. Lauderdale are spending several weeks in Canada.

The medico-military course of inactive duty training for Medical Department Reserve officers, which has been held at the Mayo Clinic during the past four years, will again be held this year from October 1st to 14th, both dates, inclusive. This inactive duty training will follow the plan so well worked out under the auspices of Colonel George A. Skinner and the military features will be under his personal supervision.

This type of military medical training is now well established and has proved its worth during the past four years. The course offers valuable and interesting training for the Medical Department officers of all the components of our national defense. The staff and faculty of the Mayo Clinic have again placed their unexcelled facilities at the service of their government in the interest of preparedness, and have extended an invitation to all the services to participate.

This short course is equally applicable to general practitioners and specialists. The morning hours are devoted to purely professional subjects selected by the student officers. The afternoon hours pertain solely to medico-military subjects and the evening hours are covered in a lyceum course of general interest.

Application for this course of inactive duty training should be made to the Corps Area Surgeon, Seventh Corps Area, Omaha, Nebraska. Applications should state the character of the work the candidate desires to follow in the morning hours. All student officers are expected to attend and participate in the afternoon and evening sessions. Each applicant should fully understand that the invitation to accept this course of study without charge is extended by the Mayo Clinic; that the project is without expense to the Government; and that one hundred hours' credit will be given those who take and complete the course. While it is desirable to attend the entire course, those whose time will not permit this may join or leave at any time and will receive credit for the hours spent in training. Uniforms are optional.

ANNUAL MEETING
 FLORIDA EAST COAST MEDICAL
 ASSOCIATION
 OCTOBER 27 and 28, 1933
 MIAMI, FLORIDA
 HEADQUARTERS
 BILTMORE HOTEL, CORAL GABLES

Dr. W. M. Shaw and family of Jacksonville are spending the months of August and September at Atlantic Beach.

* * *

ERRATA

Some errors appeared in the minutes of the Florida Railway Surgeons' meeting, as published in the July Journal.

The committee appointments, as officially made, should have been published as follows:

EXECUTIVE COMMITTEE

C. D. Christ, M.D., Orlando, Chairman
J. W. Alsobrook, M.D., Plant City
Herman Watson, M.D., Lakeland

SCIENTIFIC PROGRAM COMMITTEE

L. F. Carlton, M.D., Tampa, Chairman
G. H. Edwards, M.D., Orlando
W. J. Lancaster, M.D., Tampa

LEGISLATIVE AND PUBLIC POLICY COMMITTEE

L. M. Anderson, M.D., Lake City, Chairman
Fred H. Albee, M.D., New York and Sarasota
T. M. McDuffee, M.D., Manatee
F. J. Waas, M.D., Jacksonville
Wm. R. Warren, M.D., Key West

NECROLOGY COMMITTEE

T. M. Rivers, M.D., Kissimmee
R. R. Duke, M.D., Tampa
W. H. Grace, M.D., Ft. Myers
C. H. Kirkpatrick, M.D., Arcadia

Dr. A. B. Connor of Ft. Lauderdale was erroneously shown as Chief Surgeon for the Florida East Coast Railway.

Omission was made of the fact that Dr. Vernon A. Lockwood of St. Augustine, chief surgeon for the Florida East Coast Railway, responded to the addresses of welcome at the Railway Surgeons' general meeting.

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COMPONENT COUNTY SOCIETIES

DADE COUNTY MEDICAL SOCIETY

The regular meeting of the Dade County Medical Society was held July 7, 1933, in the Huntington Clubrooms with Dr. Gerard Raap in the chair.

The scientific program was opened by Dr. Nelson M. Black of Miami who presented a most unusual paper entitled "Radiant Energy, Its Characteristics, Biologic Action and Some Means of Protection Against the Harmful Effects to the Eyes." After exhibiting slides which showed various graphs and spectra with reference to the sun's light and the effect of various colored glasses on that light, Dr. Black then demonstrated with an actual spectrum and actual glass of several types and colors, the transmission or removal of various parts of the spectrum. Discussion followed by Drs. C. F. Roche, M. P. DeBoe, J. H. Lucinian and Nelson Black.

Dr. N. Duncan Owens presented the second paper of the evening, entitled "Acute Appendicitis of Traumatic Origin." This important subject was discussed and further illustrated by Drs. W. C. Jones, Ralph Gowdy and Duncan Owens.

The Society was particularly privileged in the next speaker, Dr. S. Parke-Smith of Cincinnati, a guest of the Society. He spoke on "Recent Advances in Urologic Surgery" with particular reference to nephropexy, which he illustrated by motion pictures.

At the business meeting which followed the scientific program plans for the coming meeting of the East Coast Medical Society were discussed.

ORANGE COUNTY MEDICAL SOCIETY

The July meeting of the Orange County Medical Society was called to order in the lounge of the Orange General Hospital on the 19th of July at 8:30 p. m., by Dr. G. H. Edwards, who was nominated to preside in the absence of the president, vice-president and councillor. The minutes of the previous meeting were read and approved. Dr. A. M. King of the United States Department of Entomology read a most interesting paper on mosquitos, their habitat and behavior, and discussed a three film picture of mosquito control work.

Dr. S. A. Shoemaker reported for his committee relative to a collection agency to be operated by the Medical Society. This com-

mittee was continued in order that it might acquire more data.

Dr. Meredith Mallory reported on the activity of a committee of which he was a member to investigate the activities of certain irregular practitioners and asked that the committee be continued.

The Society was notified that the barbers were looking for someone who would give them a wholesale examination charging only one dollar each, the examination to consist of blood, urine and physical to determine the presence or absence of contagious diseases. It was voted that the members of this Society would be unable to do that work and that the barbers should be directed to their own family physicians for examination.

Dr. G. S. Osincup, chairman of the radio talk committee tendered his resignation as he would be absent from the city several months and Dr. W. H. Spiers was elected to fill the vacancy.

Dr. Spiers reported that arrangements had been completed for the summer picnic to be held on the afternoon of the 22nd of July at Lakeside Park, and requested that invitations be broadcast from the various members to their friends throughout the State.

* * *

The annual picnic of the Orange County Medical Society was held at Lakeside Park in Orlando on Saturday, July 22nd. Guests from all sections of the State began to arrive about three o'clock and several hours were spent in greeting old friends, swimming and harmonizing. The food was most delectable.

Dr. W. M. Rowlett, president of the State Association, took this opportunity to call a meeting of his executive and cancer control committees which had complete quotas.

Due to the long distance which had to be traversed, many began leaving rather early. Instead of the rear guard of youth which usually ends meetings of this nature, those who brought up the rear were almost in a class of "old timers": C. D. Christ, John S. McEwan, Joseph Halton, W. H. Spiers, Gerry R. Holden and G. H. Edwards, who saw to it that the obsequies were properly and duly performed.

Among those present were the following:

Bradenton:
H. Gates
Clearwater:
F. E. Kaufman

Daytona Beach:
J. Ralston Wells
Dunedin:
H. E. Winchester

Ft. Lauderdale:
O. C. Brown
Leigh F. Robinson
Gainesville:
J. Maxey Dell
Jacksonville:
T. Z. Cason
S. E. Driskell
Gerry R. Holden
Edward Jelks
Louie Limbaugh
Stewart Thompson
Kissimmee:
Haynes Brinson
Lakeland:
R. L. Cline
Herman Watson
W. A. Weed
Manatee:
T. M. McDuffee
Miami:
H. A. Barge
John E. Hall
Roy J. Holmes
Homer Pearson
Gerard Raap
Joe Stewart
C. E. Tumlin
Ocala:
J. N. Moore
Eugene G. Peek
T. H. Wallis
H. F. Watt
Orlando:
H. M. Beardall

J. H. Buff
R. B. Carson
J. R. Chappell
C. D. Christ
C. J. Collins
H. A. Day
G. H. Edwards
D. T. McEwan
J. S. McEwan
Meredith Mallory
Louis Orr
G. S. Osincup
W. E. Sinclair
W. H. Spiers
Sarasota:
Joseph Halton
Tampa:
H. J. Blackmon
George Cook
J. C. Dickinson
James Estes
E. S. Gilmer
F. C. Metzger
W. M. Rowlett
Titusville:
D. H. Adams
West Palm Beach:
F. K. Herpel
Lloyd J. Netto
Winter Park:
J. F. Gardner
R. F. Hotard
Washington, D. C.:
Bernard Schultz

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

Dr. and Mrs. P. J. Hudson of Crystal River entertained the members and their families of the Pasco-Hernando-Citrus County Medical Society at Crystal River, Thursday evening, July 6, 1933.

During a five-hour boat trip on Crystal River and the Gulf of Mexico, a fish fry and picnic lunch was served on the boat, all of which was enjoyed very much by those present. All extended to Dr. and Mrs. P. J. Hudson thanks for this very enjoyable occasion.

A short business session was held on the boat. Dr. S. C. Harvard invited the Society to meet with him August 8. Motion to adjourn carried. Those present were:

Dr. and Mrs. W. H. Cox, Dr. and Mrs. G. R. Creekmore, and Miss Verona Creekmore, Dr. and Mrs. S. C. Harvard and Miss Frazee, all of Brooksville, Florida; Dr. and Mrs. George Dame, George and John Dame, Dr. and Mrs. L. H. Dame and little daughter of Inverness, Florida; Dr. and Mrs. Brown of Dunnellon, Florida, invited guests; Dr. and Mrs. P. J. Hudson and daughters and son; Captain Varn, Mrs. Varn and little son, of Crystal River Florida.

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POLK COUNTY AUXILIARY

One of the most enthusiastic meetings in the history of the Polk County Medical Auxiliary was held at the Commercial Hotel in Bartow, Wednesday evening, June 21st.

A lovely dinner was enjoyed, after which Mrs. John F. Wilson, newly elected president, presided over the business session.

Five members present had attended the State Association meeting in Hollywood in May, and each of them gave a short talk, discussing the business and social events of the meeting.

Plans were made to do some really constructive work, one project being the making of a complete layette for each hospital in Polk County for emergency cases, but not to be removed from the hospital.

Mrs. Stephen Gyland was appointed to get instructions about Hygeia subscriptions, so that a campaign for such might be launched.

Mrs. R. L. Hughes of Bartow was welcomed as a new member.

Members present were Mesdames J. G. Gilchrist, J. L. Hargrove, R. L. Hughes, C. H. Murphy from Bartow; Stephen Gyland from Brewster; G. H. Carefoot from Ft. Meade; Jas. R. Boulware, R. L. Cline, G. C. Overstreet, S. F. Smith, Walter A. Weed, John F. Wilson from Lakeland; and V. H. Ragsdale from Pierce.

The next meeting in August will be in the form of a swimming party and picnic to be held in Brewster.

* * *

MARION AUXILIARY

The Woman's Auxiliary to the Marion County Medical Society is trying a new plan for their meetings this year. The meetings are held

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monthly instead of quarterly and at the homes of the members.

The first of these meetings was held May 18, 1933, at the new home of Mrs. E. G. Lindner on Fifth Street in Ocala with Mrs. J. N. Moore as joint hostess. There were ten members present.

It was voted that the next meeting be held at the home of Mrs. J. Walter Hood with Mrs. von Engelken as joint hostess on June 15, 1933.

* * *

In the last news letter sent out by the National Press and Publicity Chairman to every state chairman and state president, and in the article written by the National President and published in the May number of the American Medical Association Bulletin, Florida Auxiliary was commended for sponsoring several speaking engagements in the state by Dr. Arthur J. Cramp, director of the Bureau of Investigation.

* * *

Your state Press and Publicity Chairman was fortunate in hearing Edgar A. Guest read the following poem from his own pen and requested a copy of it for the Auxiliary Page.

THE YOUNG DOCTOR

By EDGAR A. GUEST

They said he was a doctor six or seven months ago,
They gave him a diploma he could frame and proudly show,
And they said: "Go out and practice and just show 'em what you know."

Now I've never been a doctor, but a lot of them I've met,
And that first year, so they tell me, is a year they won't forget—

With the practice slow in growing, and the mustache slower yet.

So I chuckled when I saw him, and his curious mustache,
And I chuckled when I heard him sob about his lack of cash,
And the scarcity of people with the measles or a rash.

"I've a very fine diploma," he explained, "upon a peg,
But if something doesn't happen I shall soon be forced to beg;

It's a lonely business waiting for some fool to break his leg."

The older doctors listened to his dismal tale of woe,
And a flood of reminiscence then it seemed began to flow—

They had all been youthful doctors in the distant long ago.

They had all sat down and waited through that terrifying year,

With their skill and knowledge ready for a promising career;

They'd all grown those first mustaches so that older they'd appear.

I still see that youthful doctor with the sadness in his eye,
Sitting bravely in his office while the sick world travels by—

When that first poor patient finds him, Oh, I hope he doesn't die!



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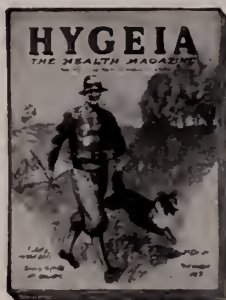
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SCHEDULE OF MEETINGS—COMPONENT SOCIETIES FLORIDA MEDICAL ASSOCIATION

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	55%
Bay	Allen, H. Miller, M.D., Millville.					17%
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		60%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	100%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	90%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	41%
Duval	F. L. Fort, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	72%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	60%
Hillsboro	C. W. Bartlett, M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	73%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna.	Yes.	56%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	82%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	88%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	61%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	46%
Marion	J. L. Chalker, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	62%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	Louis Orr, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	73%
Palm Beach	James L. Carlisle, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	89%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	67%
Pinellas	Alvin L. Mills, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	76%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	83%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	34%
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	91%
St. Lucie-Okeecho- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	100%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	92%
Seminole	J. T. Denton, M.D., Sanford.	2nd Friday	8:00 P.M.	City Hospital Sanford		100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	Jas. L. Weeks, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	71%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	52%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.

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THE JOURNAL

— OF THE —

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 3

Jacksonville, Florida, September, 1933

Yearly Subscription, \$3.00
Single Copy, 30c

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Florida Medical Association, Jacksonville, April 30, May 1, 2, 1934.
American Medical Association, Cleveland, June 11-15, 1934.
Southern Medical Association, Richmond, November 14-17, 1933.

Entered as second-class matter under Act of Congress of March 3, 1879, at the Postoffice at Jacksonville, Florida, October 23, 1924

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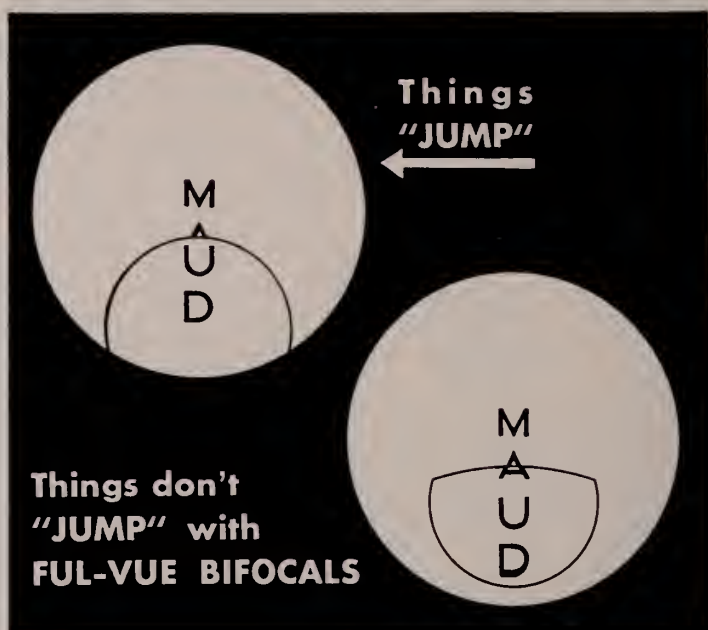


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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, September, 1933

Number 3

A REVIEW OF SOME URINARY ANOMALIES AND PATHOLOGIC CONDITIONS PRODUCING SYMPTOMS OF ESPECIAL INTEREST TO THE GENERAL PRACTITIONER*

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Miami.

From the title of our paper it might be supposed that we intend to deal this morning with some specific cases that have come to our attention in which urinary anomalies and pathologic disease have produced peculiar symptoms for the individual case. However, this is not the purpose of our appearance before you, although in the course of our presentation we shall speak of several individual cases and shall demonstrate with lantern slides many others. The direct purpose of this thesis is to actually review with you the symptoms and clinical findings associated with urinary tract disease with which, no doubt, each of you is familiar, but in your various branches of medical practice you are not called upon to focus so accurately on these individual structures and therefore do not keep these many simple thoughts readily in mind.

A clear conception of the symptoms produced by urinary tract pathology is possible only if a thorough knowledge and mental visualization of the regional anatomy of the structures within the abdomen is had. The kidneys, ureters and urinary bladder are so situated that only the parietal peritoneum separates them from immediate contact with some of the other vital organs. Through the autonomic nervous system each of these structures is directly connected with the other viscera. Is it any wonder then that precision and exactness are so imperative before the accusing finger can be pointed to the specific source of a patient's symptoms?

We have not the time to describe in detail the regional anatomy nor the extensively developed sympathetic nervous system which permits communication between the various structures within the abdomen, but we believe that the latter is so important a part of the human mechanism and

that on a knowledge of it depends accuracy in diagnosis that it is a necessity that we familiarize ourselves with this subject. There is hardly a disease along the urinary tract, be it pathogenic or mechanical in nature, which does not soon proclaim its presence to the other abdominal structures by means of its reflex arcs. To illustrate, we call your attention to the almost constant symptoms of nausea and vomiting that is associated with the passage of calculi down the ureter.

Pain may or may not be a symptom which first directs the patient's attention to disease along the urinary tract or elsewhere. It is well known that the various organs are productive of pain different in character, severity and reference. The pain produced by disease in the lower pleural cavity is almost invariably associated with difficulty in or an increase in the rate of respiration. While it is true that diseases of the kidney, associated with marked pain, will usually produce some difficulty in breathing on the affected side, due to voluntary guarding on the part of the patient, it does not increase the respiratory rate nor does it inhibit voluntary respiratory excursion. Diseases of the liver, including stones in the hepatic ducts usually send pain upward into the right shoulder region or forward along the costal margin. This statement applies fairly constantly to diseases of the gall bladder and its ducts. Diseases of the pancreas produce a pain of a fairly violent nature and one which is referred principally to the epigastrium. Disease of the duodenum and pyloric end of the stomach produces a gnawing rather than a lancinating pain and the pain is usually restricted to the epigastric region in front and goes through to the center of the back. Diseases involving the colon carry no specific pain unless due to acute diverticulitis, but produce a sense of tenderness which is increased by pressure over the affected area. Diseases of the spleen, especially those of an acute nature, produce a pain which is confined to the sub-costal area on the left side and runs forward and medialward towards the midline. This pain is almost invariably of a severe type and is constant. The pain of appendicitis might readily be directly over McBurney's point or in the right flank if the appendix is situated retroceally. The pain is constant, only moderately severe, and

*Read before the Sixtieth Annual Meeting of the Florida Medical Assn., Hollywood, May 2-4, 1933.

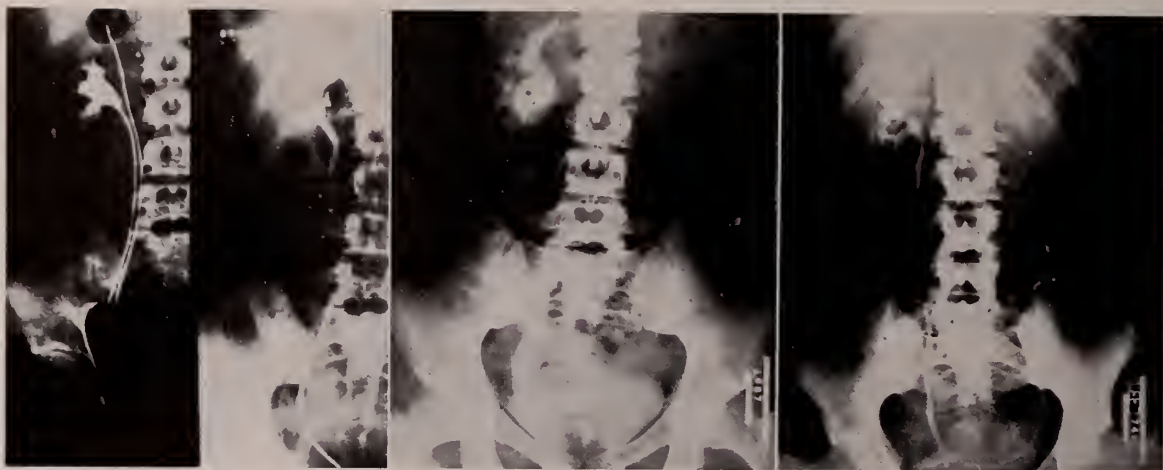


Fig. 1 "A"

"B"

Fig. 2

Fig. 3

Fig. 1. A. Bilateral reduplication of renal pelves and ureters (right side shown) with severe recurrent pyelitis affecting lower pelvis of right kidney. B. Same case showing normal upper pelvis following heminephrectomy of lower half of right kidney.

Fig. 2. Massive hydronephrosis and megalo-ureter of right kidney with complete dysfunction of left kidney as

shown by excretion urogram. Pathology due to congenital stenosis of right orifice and acquired impassable stricture of left ureter.

Fig. 3. Tuberculosis of right kidney treated for 15 months as neurasthenia and nervous irritability of the bladder. Note complete obliteration of pelvic curve of ureter due to upward retraction.

tends to localize rapidly. In appendicitis a point of value is that the first sign of pain is usually referred into the epigastrium, but soon fades away from this point and establishes itself in the region of the right lower quadrant. Adnexal disease in the female causes a severe type of distention pain low down in the abdomen on the side involved, and in the male, diseases of the seminal vesicles and prostate produce a pain in the lower part of the back, hardly ever higher than the iliac crest and this pain is usually referred downward and forward over the lower abdomen along the course of the spermatic cord and into the epididymis of the side involved. Disease of the sigmoid and rectum produces a tenderness in the left side and almost invariably is associated with rectal tenesmus. The pain resulting from disease of the vertebral bodies and psoas muscles is usually of a sharp, stabbing type and is produced only upon attempt of the patient to bend the spine. *The pain of actual kidney disease is always found in the costo-vertebral angle posteriorly and if referred is found to travel downward and forward along the course of the ureter.* Herpes zoster is the only other disease producing the identical type of pain as seen in renal colic and the differential points are that there are no associated vesicle symptoms and the pain is constant rather than "colicky" and intermittent in nature and, as a rule, there are present definite skin manifestations. Pain pro-

duced by calculus in the upper half of the ureter is the pain of renal distention and is most prominent in the costo-vertebral angle and flank. There is hardly ever pain directly over the position of the stone in this area, inasmuch as the nerve supply in the upper half of the ureter is practically nil. Ureteral obstructions, be they due to stone, stricture, kink, or what not, in the lower third of the ureter produce a definite, severe "colicky" pain which is referred into the bladder, causing vesicle irritability and it is also referred into the genitalia on the affected side, either as a dull aching sensation or as a severe, stabbing pain. Calculi in the lower third of the ureter may also produce a pain directly over the point of impaction.

Pain is but one symptom that we as clinicians must consider. To the patient we admit that it is of utmost importance, and to gain relief therefrom is primarily the reason for the patient visiting or calling in a physician. To this point we should again like to impress a doctrine which has great merit; namely, that opiates and other sedative drugs should never be administered for relief of pain in the abdominal cavity until the attending physician is fairly certain that he has determined the cause of that pain. On the other hand, pain at times is so severe that the patient is unable to communicate with the doctor with sufficient intelligence and coherence to aid him in determining its exact source. These cases are

the exception to the rule and it is our opinion that some mild sedative, one which does not entirely alleviate the pain, but simply lessens it, is of value, since the partially relaxed patient can then be of service in helping us localize the points of tenderness.

The proper interpretation of temperature charts is invaluable and should never be minimized. The fever associated with acute pulmonary and pleural disease runs higher and is, as a rule, more consistent. In hepatic disease, fevers usually are of an intermittent character and the peak is sustained for a longer period of time. Temperature associated with appendicitis does not, as a rule, run unusually high unless there is a complicating factor to consider, and this also is true of disease of the colon. On the other hand, in splenic disease we usually find a high febrile reaction. Ulcers of the duodenum and stomach, even in the presence of great pain, usually run little, if any, fever. Renal disease, in the presence of infection, runs a typical saw-tooth temperature curve, with the peak going much higher than the fever in most abdominal diseases. Characteristic of infection in renal disease is the associated chill that is not the rule with infections elsewhere. This statement must be qualified by the assertion that non-infected renal tumors as a rule cause no elevation in temperature and the same is true for the non-infected hydronephrosis associated with ureteral obstruction. However, once the urine back of any ureteral obstruction has become infected, eleva-

tion of temperature is certain. Seminal vesicular and prostatic disease is associated with elevation of temperature which, in most instances, runs higher than even the temperature curve of renal infection, and this likewise is true of pelvic disease in the female. It has been a fairly constant observation in our practice that when seminal vesicular infections produce a rise in temperature over 100° , within twenty-four hours an epididymitis on the involved side develops.

We must not lose sight of the value of blood picture interpretations in our differential study. White blood counts are of inestimable value. In pulmonary disease it is not uncommon to find a white blood count running into 20,000 and this is true of liver abscess, diaphragmatic abscess and gall bladder disease. The white blood count in appendicitis and diverticulitis is the type that runs from normal to ten or twelve thousand, but rarely beyond except in complicated cases. In splenic disease the white cell count is to be regarded as a most important factor in diagnosis and it is here that the count runs unusually high or there is a definite leukopenia with such diseases as malaria, typhoid, and tuberculosis. Ulcerative diseases of the duodenum and stomach will produce very little increase in our white cell picture until perforation has ensued. In renal infection the tendency is towards a high white count usually above twelve thousand and may even rise over 20,000. The point of differentiation here is that in non-infected obstructive urinary disease, particularly the passage of calculi, there is neces-



Fig. 4

Fig. 5

Fig. 6

Fig. 4. Marked ptosis of right kidney (X-ray exposures made serially in supine, semi-erect and erect positions) in 17-year-old girl which had been constantly diagnosed as ovarian cyst.

Fig. 5. Calcification of uterus. This case was operated as bladder calculus on strength of flat X-ray film.

Fig. 6. Multiple urinary calculosis showing staghorn

stone completely filling right kidney pelvis, date-seed stone obstructing left ureter, four stones in bladder, one stone in prostate, one stone in prostatic urethra, and large stone in bulbous urethra. This patient had seen twelve doctors in past ten years and all treatment apparently directed towards bladder infection, as patient had persistently refused thorough urologic investigation.

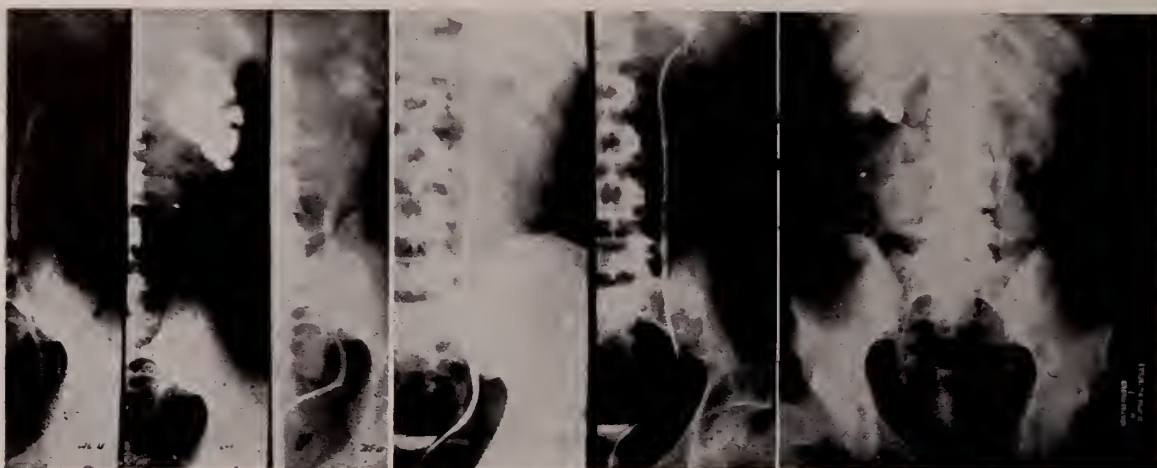


Fig. 7 "A"

"B"

"C"

Fig. 8

Fig. 9

Fig. 7. Complete stricture at uretero-pelvic junction in 18-year-old boy with marked pyo-hydronephrosis due to aberrant blood vessel. *A* shows ureter injected with contrast fluid from below; *B* is pelvis filled with contrast fluid and film made 20 minutes after removal of catheter, showing complete retention; *C* final result following removal of aberrant blood vessel and uretero-plastic correction of strictured area. This case treated for three years as malaria and colitis.

Fig. 8. Duplicate studies of left kidney in 24-year-old boy running unexplained fever. Urine persistently negative to all pathologic material. Diagnosis of renal tumor

made due to marked obliteration of middle and lower calyces. At operation large tuberculoma of kidney was discovered. Patient completely relieved by nephrectomy.

Fig. 9. Large walled-off psoas abscess with destructive process in third and fourth lumbar vertebrae. Symptom was that of pain in right kidney. Note upward displacement of right kidney due to abscess mass.

NOTE: The authors do not wish to convey the impression that these cases were discovered by them, but rather represent a few of the cases collected by them which have been referred by colleagues who have in many instances diagnosed the existing pathology.

sarily no increase in the white blood picture. Adnexal and genital disease in both the female and male are productive of fluctuating blood counts, high one day, with a drop the next, and this followed by another ascent, etc.

A thorough consideration of differential smears is of great diagnostic aid. Many constitutional diseases capable of producing abdominal symptoms are visualized strictly on the basis of blood studies; blood stream infections, the leukemias, malarial fever, typhoid, and such are examples of this. When we refer to blood studies we do not mean merely the counting of cells nor visualization of stained smears, but we include also serologic reactions, blood chemistry estimations and blood culture. Not infrequently the cause of intense abdominal pain due to visceral crisis is established solely by the serologic reaction to one of the many tests for syphilis. In a similar manner such diseases as typhoid, paratyphoid and undulant fever affecting the abdominal organs and producing symptoms thereof are diagnosed by the blood culture.

No examination is complete without a very careful study of the urine. Much information can be obtained if the physician takes occasion to interpret carefully his findings. A negative urine does not altogether rule out the possibility of urinary tract pathology, as we shall mention

later, but it is a fairly consistent rule in this direction. At this time let us again stress the grave error of considering with a critical mind the voided specimen from the female or even the male who has once had a genital tract infection. The catheterized specimen of urine in the female is the only dependable source of information and in the male the second portion of a voided specimen. Even here in cases of low grade prostatitis and posterior urethritis, it is necessary to obtain a direct specimen from the kidneys. It is impossible to ask of a laboratory technician every specific test of urine as a routine procedure and for that reason we must rely on associated symptoms in deciding what information to be gained from a study of the urine is of importance. To consider the pathology index of the urine on the basis of chemical and gross microscopic findings is not sufficient. The centrifuged urine must be subjected to stained smears and cultures in order to determine the causative bacteria in cases of infection.

To emphasize the importance of X-ray facilities as an adjunct in urologic diagnosis is needless. In the same voice, however, a warning must be sounded, that incomplete X-ray study is a very dangerous thing. (It has been said that a proper diagnosis should be made in 95% of all urologic affections and we feel that this broad statement

would not hold true and the percentage would be hardly half as great were it not for the ability to visualize these structures by means of the X-ray.) The taking of what we know as flat films of the K. U. B. tract and abdominal cavity in all conditions involving this area is becoming a widespread procedure and justly so. There are, however, several features of this routine measure that must be called to your attention. First, when a flat K. U. B. film is requested, be sure that the entire urinary tract is included. We have one case in our record where an enormous pyonephrosis was subjected to permanent lumbar nephrotomy drainage for an impassable stricture in the lower third of the ureter. The X-ray films made at the time showed no calculi along the course of the ureter, but a later study of these films revealed the fact that several inches of the terminal end of the ureter were not included in the film. Films were then made of the bladder and lower ureteral segments and a "date seed" stone an inch long was found impacted in the last inch of the ureter. (Following the removal of this stone the nephrotomy opening was allowed to heal and the patient, fortunately, regained a fairly normally functioning kidney.) Another point is that these so-called flat films should be interpreted by an experienced roentgenologist and not by one who has had no vast experience in shadow visualization. The third point is one which we believe induces frequent error and that is the making of flat films without proper preparation of the patient. The attempt to locate renal shadows, stone shadows and what not in a film that is largely filled with over-lying shadows of gas or fecal matter in the intestinal tract is quite unfair to both the roentgenologist and the patient. A fourth point which comes to mind is the danger of drawing conclusions from a simple flat film. A shadow lying in the path of the ureter may or may not be a calcification within the lumen of that canal. It is quite true that clinical evidence may tend to secure our belief that such is the case and yet those of us who deal constantly in this field have learned sorrowful lessons by just such a practice. We have seen cases with all the clinical manifestations of ureteral obstruction due to stone, we have seen a flat film of that very patient which revealed a shadow apparently definitely in the line of the ureter, a shadow which, if calculous, would certainly appear too large to pass and we have seen this same patient consent to operation but refuse cystoscopic study. At operation we have found what this shadow repre-

sented—if we were so fortunate as to locate it at all—to be either a calcified lymph gland or a calcified mesenteric gland and several days later we have had the embarrassing experience of having that same patient pass from his bladder a very small calculus that was of a type that in our original films cast no shadow at all. We have also made the mistake of interpreting flat films, where shadows appeared to be lying too far outside the line of the ureter, as being not a ureteral stone, and have advised appendectomy. Again, several days following operation for the removal of what was found to be a fairly normal appendix, the patient would either pass a ureteral stone or be seized with colic so severe that ureteral catheterization to surmount the obstruction was necessary to afford relief. It must be remembered that 20 to 30 per cent of urinary calculi cast no shadow at all on the X-ray film, and it is only by ureteral catheterization whereby obstruction is encountered that a diagnosis is sometimes substantiated. These errors can be very easily prevented if it is insisted that a catheter be passed into the ureter on the affected side and a film made with the catheter in place. As we shall show you in our lantern slide demonstration, these are not the only instances where faulty interpretation is possible. We have in our records to date three cases of calcified uteri, two of which were subjected to suprapubic cystotomy for vesicle stone and in each instance all of the clinical symptoms would have led almost every one of us to accept the diagnosis as nothing but vesicle calculi. We do not mention these cases with the idea of pointing an accusing finger, since we, too, have been guilty of these errors, but with the hope of emphasizing the importance of thorough investigation inasmuch as the armamentarium is at our disposal and, for the good of the patient, should be used.

It is not always an easy matter to distinguish renal shadows from shadows due to other abdominal masses, be they normal or pathological structures. However, it is not at all difficult in most cases definitely to outline almost every abdominal and retroperineal organ, if the various measures at our command are called into play. The flat film merely gives us shadow outlines of the larger structures such as the liver, spleen, kidneys, occasionally the bladder and pathologic tumors and calcifications. It has been our experience on several occasions to find in a flat film what would be considered by any of you a kidney well within the range of normal, so far as size

is concerned, only to demonstrate at cystoscopy a complete duplication of pelves and ureters, the so-called double kidney.

In X-ray interpretation of the urologic tract it is important that we consider not only the shape, size and position of the kidneys, but by contrast media, the shape, size and position of the kidney pelvis and ureter must be studied. Many large tumors of the kidney, especially those of the upper pole, are not detected by palpation and are not suspected by a flat X-ray film except where the kidney is pushed far down, but must be diagnosed purely on the basis of shadow-graphs of the pelvis of that kidney. Renal tuberculosis is at times diagnosed mainly on the evidence of the pyelogram. Not infrequently a simple urogram is of the utmost importance in differentiating a gall-bladder mass from a kidney mass, a large spleen from a kidney, a diseased cecum from a kidney, and various abdominal tumors from kidney.

We next ask your consideration while we discuss some symptoms, both physical and mechanical, and their interpretation from a strictly urologic standpoint. The presence of pain in the costo-vertebral angle, radiating downward and forward or referred into the genitalia is certainly sufficient to call for investigation of the urinary tract. The presence of pus or red blood cells in the catheterized specimen of urine, with or without elevation of temperature, must be interpreted as sufficient evidence of urinary tract pathology to warrant thorough study. The presence of classical urinary symptoms of frequency, urgency, tenesmus, nocturia, et cetera, should not be palliated with antiseptic or sedative drugs until the cause of these symptoms has been determined. The detection of enlargement of one or both kidneys or the finding of a tumor mass in the flank must be considered from a urologic aspect until the urinary tract has been ruled out. We have recently seen a case, referred to us for study of an enlarged right kidney, in which it was found by careful study of the entire urinary tract, that this enlargement was purely compensatory and that the pathology was a completely destroyed left kidney due to stricture of the ureter and which, when removed, was found to be tuberculous. Ureteral obstructions, be they due to kinking of the ureter, stricture of the ureter, or calculus, may be either complete or incomplete. In complete obstruction a negative bladder urine does not exclude pathology of the kidney above due to the fact that this very kidney may be filled

with pus and blood which is not permitted to escape downward into the bladder. In such instances the bladder urine merely represents the calibre of urine excreted from the normal kidney on the other side. In complete obstructions of the ureter the danger lies in total dysfunction of the renal tissue on that side, with the result that the often referred to "pain of renal distention" is not present. In partial obstructions of the ureter this phenomenon does not hold good, but on the contrary there is a tendency towards continued excretion of urine from the affected side, with the result that back pressure and distention pain must follow. (A peculiar finding in ureteral obstruction histories is that with ureteral stricture there is a tendency for referred pain to be carried down along the outside of the thigh, while with calculous obstructions the pain is usually referred into the genitalia of the affected side or into the bladder.)

In our consideration of kidney pathology, per se, we must ever keep in mind the part that congenital anomalies and congenital pathology play. Aberrant blood vessels are not an uncommon cause of marked renal disturbance due to resulting ureteral kinks and obstruction. Duplication of renal pelves and ureters, be they complete or incomplete, unilateral or bilateral, is quite often productive of urinary disease in early adult life. Congenital tumors such as polycystic disease and malignancies seen in infant urology must ever be borne in mind. Horseshoe kidney, ectopic kidneys and the abnormally placed ureteral outlet (ureters opening outside of the bladder, such as those opening into the posterior urethra, which have been definitely demonstrated) are invariably productive of symptoms in early adult life. These conditions we would class as malformations of the urinary tract. (At this point we should like to lay emphasis on an observation that we as urologists are making as a result of a more thorough X-ray and urologic investigation of our cases. We refer to the frequent finding of nephroptosis by insisting upon an upright film in all thin, anemic, neurasthenic types. Whether the large increase in the number of low kidneys which are seen is due to more rigid examination than was formerly made or whether the incidence has actually increased in the new era of diets and high living, is a point that we can not decide at present. But it is certain that this condition is accounting for a great number of cases of renal disease which come to our attention.) There is one classical observation, which if obtained in

a history from a patient, should always be cause for making a flat film in the upright position; that being the statement that severe renal pain which might be suffered by the patient is almost immediately relieved if the patient goes to bed and lies flat for a short time. The relief obtained is due entirely to the fact that on assuming the supine position the kidney falls back into its normal bed, obliterating the kink which produces the ureteral obstruction and permitting the kidney pelvis to empty itself of accumulated urine which accounted for the distention pain.

The diagnosis of renal tumors depends essentially on a proper interpretation of a urogram. It is not necessary to burden you with the various phases of this diagnostic measure, other than to say that films depicting abnormally filled kidney pelvises or pelvic distortions must be carefully studied by one who is entirely familiar with this branch of roentgenology. It is not a fast rule that renal tumors are productive of hematuria nor is it by any means the rule that hematuria indicates renal tumor.

Differential renal function tests are imperative whenever surgery on one or both kidneys is contemplated. Quite often at operation the final decision as to whether or not to remove or to leave a kidney rests entirely on the question of the functional capacity of that kidney under the influence of its pathology. To remove a diseased kidney without first having ascertained the ability of the remaining kidney to adequately sustain life is beyond pardon. In cases which necessitate surgery of both kidneys not infrequently the renal function estimate from the separate sides is the deciding factor in our choice of the kidney which shall be first attacked. This thought causes us to mention to you a rule which is almost universally accepted by urologists, that in cases where both kidneys must be subjected to surgery we attack the more badly affected kidney first, with the hope of restoring it to some degree of normal function, before attempting any operative measure on the less diseased one. With some restoration of the function of the badly diseased side, surgery of the remaining kidney is not as hazardous since there is an added support.

We have purposely held until the last a discussion of urinary bladder pathology, inasmuch as the symptoms and clinical findings produced therefrom are almost without exception so distinct that there should be little difficulty in arriving at a definite diagnosis. Without exception

vesicle pathology, and we include here bladder neck obstructions, will give either in the history from or physical examination of the patient, information which should lead the careful diagnostician to confirm his impressions with cystoscopic examination of his patient. By means of the cystoscope every affection and disease of the bladder and bladder neck can be observed and carefully studied. To take the time to discuss within the limitations of this paper the differential diagnosis of vesicle and vesicle neck lesions would be only burdensome. However, numerous conditions involving the bladder, by means of back pressure, will produce an associated chain of symptoms referable to the kidneys. Similarly, not infrequently bladder neck obstructions produce a definite group or reflex gastro-intestinal symptoms or uremic manifestations which, to the general practitioner, might lead to a temporary confusion. It is, therefore, essential to include questions regarding the genito-urinary tract in obtaining a history from any patient. In the old prostatic patient, for example, who has become accustomed to his difficulty in urination and has accepted, as simply the curse of an old man, his frequent nocturia, unless carefully questioned, one is likely to obtain from him only the facts that he is losing his appetite or bothered with constant nausea and drowsiness. In the female, pelvic pathology will produce in many instances pressure upon the bladder to the point that the patient consults a physician principally for pain on or frequency of urination. By means of a cystoscopic examination the bladder as primarily the cause of the patient's symptoms can readily be ruled out. It is usually possible to observe within the interior of the bladder any mass which is pressing on it from without.

In conclusion, may we point out to you that within the scope of this thesis we have considered the following facts which are essential to a proper differential diagnosis of disease affecting the various structures within the abdomen and lower pleural cavities:

- (1) A thorough knowledge of regional anatomy.
- (2) A clear conception of the action of the sympathetic nervous system.
- (3) Symptomatology of structures lying within the theoretical divisions of the abdomen.
- (4) The importance of X-ray facilities now available as an aid to diagnosis.
- (5) The importance of the proper interpre-

tation of flat films with a consideration of the possibilities of error.

(6) A consideration of fever and the application of temperature charts to the interpretation of the source of infection.

(7) A study of the urine and a consideration of the manner in which it must be obtained.

(8) Interpretation of blood pictures, including blood counts, stained smears, serologic tests and cultures.

(9) Differential points of diagnosis of urinary symptoms and findings.

(10) A consideration of the interpretation of urograms.

(11) The minor evaluation of bladder disease with associated pathology producing gastro-intestinal and uremic manifestations.

CARCINOMA OF THE COLON*

A PLEA FOR RECOGNITION OF EARLY SYMPTOMS

GEORGE M. DAWSON, M.D., F.A.C.S.,

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The effective treatment of cancer with the many five-year cures recorded during the past fifteen years, has been accomplished by education of the public through the lay press emphasizing early symptoms and education of the profession in the methods of early diagnosis. We rarely see the late malignancies of the lip, skin, breast or uterus so common even ten years ago. The patient seeks advice early and the average doctor recognizes the condition in the curable stage.

Malignancies of the colon, however, are usually discovered in the late stages. There has been little written on the subject in the lay press and the early symptoms are interpreted by the physician as due to one of the minor intestinal disturbances so frequent in the average practice. Earlier diagnosis will be possible if the physician will keep in mind the early symptoms and investigate any suspicious syndrome.

Before describing symptoms, the function of the colon and the pathology of the tumors usually present should be briefly considered. The difference in function and variation in the type of tumor in the two halves of the large intestine explain the variation in symptoms.

The large intestine is divided physiologically into right and left portions by the midline of the transverse colon. The right half originates from the midgut and is an absorbing area whose contents are semi-liquid. The left half originates

from the hindgut and is a storage reservoir, the contents of which are solid.

Pathologically there are three types of tumors.

(1) Medullary adenocarcinoma. This tumor is found in the right half of the colon. It is a large, fungating, ulcerating type with little tendency to obstruct the lumen of the bowel.

(2) Scirrhotic carcinoma. This type is found in the left half of the colon. It is a small, firm, constricting type with a tendency to obstruction.

(3) Mucoid adenocarcinoma. This is a rare type of growth found in all portions of the large intestine. It spreads widely and has little tendency to obstruction.

There are three early symptoms which should lead us to suspect malignancy in the colon.

(1) Alteration in the usual bowel action.

(2) Abdominal pain.

(3) Bleeding from the bowel.

Every adult develops a type, time and frequency of bowel action peculiar to that particular individual. Alteration in the usual bowel action of the particular patient considered is most significant. This may manifest itself as a mild diarrhea of short duration with a tendency to recur, a gradually increasing constipation, constipation alternating with periods of usual bowel action or constipation alternating with diarrhea. According to Rankin: "Approximately 95% of carcinomas of the entire colon present no more definite symptoms in the early stages."

Pain usually accompanies other manifestations. In the early stages of the disease it is not of an alarming nature and is often disregarded because of its mild indefinite character. It may be located anywhere in the abdomen but is most frequent in the epigastrium. It might be described as a mild epigastric distress of short duration with long intervals of freedom from discomfort.

Bleeding from the bowel occurs. It is less frequent and has less significance than most writers would lead us to believe. Blood in the stool, however, should mean investigation of the colon regardless of other apparent pathology.

With tumors in the right half of the colon change in the character of the bowel action, pain, and bleeding occur. Pain is either in the epigastrium or in the right side. It is mild and frequently accompanied by some flatulence. A diagnosis of chronic appendicitis or cholecystitis is often made. This is the absorbing area of the large intestine and the tumors are of the large ulcerating type. A frequent early symptom is a marked secondary anemia with loss of weight and

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

strength without apparent cause and with no abdominal signs or symptoms. A tumor mass may be palpable in the early stages particularly if the cecum is the site of the tumor.

The left half of the colon is a storage space and the tumors are usually of the scirrhus type. It is difficult to suspect a new growth in this area until acute intestinal obstruction forces emergency surgical interference. The usual early symptom is again alteration in the bowel action. A frequent syndrome is constipation with colicky pains referred to the left side accompanied by moderate flatulence. This group of symptoms occurs in attacks of short duration with comparatively long periods of freedom from disturbance.

I am using the following three case reports of patients coming under my observation recently as illustrations of the points I wish to emphasize.

CASE No. 20881. Admitted Feb. 1, 1932. Male. Aged 38. Eight months previous to admission this patient consulted a physician because of mild epigastric discomfort. This appeared in attacks lasting two or three days and was accompanied by slight abdominal distention and constipation. He was given a mild cathartic mixture, a hyperacidity diet and sent on his way. He had several attacks of the same pain, distention and constipation during the next four months which were promptly relieved within 12 hours by limitation of diet and the cathartic. Constipation was the only alteration in the usual bowel action.

Five months before admission he suffered an acute abdominal crisis. He had a slight fever, severe cramp-like pain in the entire lower abdomen with nausea and vomiting and an increase in white blood corpuscles and percentage of polymorphonuclears. A diagnosis of acute appendicitis was made and the appendix removed. At operation it was noted that the appendix was apparently inflamed but not sufficiently diseased to account for the severity of the symptoms. He made a prompt recovery, leaving the hospital in ten days.

After this operation he had constant discomfort. There was epigastric pain of a mild nature. He could obtain a bowel action only by means of an enema or strong cathartics. There was no nausea or vomiting or any alteration in the bowel action except the constipation noted. He consulted doctors at various places in his travels but was at each visit assured that the condition was due to adhesions and would probably im-

prove with time. Three days before admission the cramp-like pain in the epigastrium increased in severity. Distention of the abdomen persisted in spite of enemas and cathartics. On the day of admission no further bowel action could be obtained, vomiting was continuous and the abdominal pain increasing. I first saw him at this time. A diagnosis of acute intestinal obstruction was made and laparotomy advised. At operation the bowel was found to be completely occluded by a scirrhus carcinoma of the sigmoid.

COMMENT

This patient had symptoms for eight months previous to admission to the hospital. Five months before the final operation there occurred an acute abdominal condition diagnosed and operated upon for acute appendicitis. Although the pathology of the appendix was not apparently sufficient to account for the acuteness of this disturbance no further exploration was made while the surgeon had the abdomen open or after recovery from the operative procedure. The patient persisted in complaining of abdominal discomfort which was explained as due to adhesions. It took the crisis of an acute intestinal obstruction to force recognition of the real difficulty. In defense of the doctors involved, it may be said that this patient was traveling from place to place and from doctor to doctor, so that no one had the opportunity to observe him for any length of time. However you excuse it, the fact remains that this patient lost eight months of valuable time after the first symptoms appeared.

CASE No. 20720. Female. Aged 54 years. Admitted Jan. 7, 1932. This patient had been ill more or less all of her life. She had been under the care of the same physician since girlhood. For the past 15 years she had had attacks of palpitation of the heart, nervousness, indefinite abdominal disturbances accompanied by diarrhea or constipation. At no time had any real pathology been discovered except an acute appendicitis 20 years previous to the present difficulty.

One year before admission she had an attack of cramp-like pain in the abdomen, accompanied by nausea and alternating diarrhea and constipation. This lasted three days. At the same time hemorrhoids appeared. Since this attack about every four weeks she had a similar disturbance lasting two or three days. A diagnosis of colitis was made without further investigation. Four months before admission a similar attack occurred but varied in that the bowel action con-

tained large amounts of mucus and streaks of bright red blood. The new symptoms were ascribed to the hemorrhoids and an operation performed for their removal.

Following this operation the bleeding and mucus discharge continued but the patient was sent South to recover from her rather bad summer. Two weeks before admission I first saw her in an attack as described above and advised X-ray and proctoscopic examination. This was done and a new growth in the sigmoid was revealed.

COMMENT

This patient was of the neurasthenic type. The same family doctor had taken care of her for 25 years. He had often heard a long string of symptoms referable to every part of the body with no pathology to account for them. She had a mild, recurring abdominal disturbance accompanied by alteration in the bowel action which was disregarded. The first positive sign appeared in bleeding from the bowel. Examination revealed hemorrhoids and hemorrhoidectomy was done without further investigation. Persistence in the bleeding forced her to seek further advice and the true pathology was discovered one year too late.

CASE No. 20756. Male. Aged 64. Admitted Jan. 13, 1932. The first symptom noted 7 months before admission was general weakness. This gradually increased until he was bedridden. This weakness was accompanied by gradual loss in weight, slight nausea and loss of appetite. There was no alteration in the character of the bowel action and no abdominal symptoms except slight epigastric soreness. He had visited several doctors who had told him he was anemic and had given him various types of tonics. At no time during the seven months of disability was it suggested that he should have an examination to determine the cause of the anemia.

On admission he had all the signs of a marked secondary anemia, including red blood corpuscles of 2,250,000, hemoglobin 50%. He had no alteration in the bowel action and no abdominal signs except a slight tenderness in the right upper quadrant. This patient was investigated by means of X-ray of the stomach and gall-bladder, blood counts, blood cultures, Wassermann reactions and extensive stool examinations. Nothing was found and the anemia remained unexplained. After 18 days of study a barium enema was advised as a last resort and a carci-

noma of the hepatic flexure of the colon was discovered.

COMMENT

This patient had a well defined secondary anemia of unknown cause for seven months. There were no abdominal symptoms. Every portion of the body except the colon was investigated by the clinical laboratory and the roentgenologist. It is well to remember that malignancies of the right half of the colon can cause a marked secondary anemia without symptoms or signs referable to the abdomen in general or the large bowel in particular.

As will be noted in this outline of early symptoms, they are mild, rather indefinite and are frequently misinterpreted by the physician. Any of them should suggest carcinoma and lead to investigation of the colon by means of the proctoscope and X-ray. I do not intend to outline the details of differential diagnosis. *It is not difficult to make a diagnosis once cancer is suspected. The difficulty lies in making ourselves suspect it.* This paper will have served its purpose if it brings to your attention the possibility of carcinoma of the large intestine being present in the following conditions:

(1) The persistence of mild, indefinite abdominal discomfort occurring in short attacks associated with alteration in the usual bowel action.

(2) The presence of blood in the stool in gross or occult amounts even if other pathology is present such as hemorrhoids as an evident explanation of the sign.

(3) The presence of unexplained secondary anemia with loss of weight and strength even in the absence of abdominal symptoms or alteration in the usual bowel action.

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DISCUSSION

Dr. J. W. Snyder, Miami:

Doctor Dawson has presented a very interesting subject. While we pay a great deal of attention to other conditions, malignancies of the colon are frequently overlooked. Many of them go to the stage which Doctor Dawson has described.

When we consider the colon from a physiological standpoint it presents many interesting possibilities. The right half of the colon is of much larger calibre than the left and a growth in the right side may reach considerable size and still present no obstruction while a smaller growth in the left could produce a complete obstruction. The right half of the colon as Doctor Dawson states is the absorbent portion of the bowel. Its contents are liquid and it is estimated that ninety per cent of the fluids are absorbed in this area of the intestine. The left colon has a storage function and here the fecal contents are formed and inspissated. The type of growth found in the right colon is usually of the spreading fungating type which may show ulceration but it is an interesting observation that it is rare to find blood in the stools with right colon growths; however, this type of growth produces a very marked secondary anemia. The definite cause of this anemia is not known but it is presumed that the absorption of toxins from the growth may be a factor. The symptoms with a right colon growth are rather mild, an indefinite abdominal discomfort together with some cramping pains, and local soreness may be the only complaint. Diarrhea may be present from intestinal irritability. The appendix, gall-bladder, or kidney are more apt to be considered than the colon in the diagnosis. The palpation of a tumor in the right abdomen may be the first definite evidence of trouble.

Malignancy in the left colon, as Doctor Dawson has stated, tends to be obstructive. The common type is the encircling scirrhotic type of carcinoma although a fungating growth may also produce obstruction. Left colon growths tend to bleed and it is with a growth in this location that blood appears in the stool usually accompanied by mucus. The clinical picture is that of obstruction alternating with diarrhea. Colicky pains accompany the obstruction and if severe the obstruction produces abdominal distention and vomiting.

Colon malignancies in general tend to be relatively benign growths graded two or three as a rule and they present a very good outlook from the standpoint of cure, even more so than malignancies in other parts of the body. It is common to find in death produced by a malignancy of the colon that no evidence of new growth can be found outside of the colon itself.

The mortality associated with surgical procedures should not be excessive and the ultimate

outlook should be reasonably good for cure. Operation in the presence of an acute obstruction is contraindicated as a rule. Colon surgery should be done only when the obstruction has been relieved. Fortunately, in nearly all cases this can be accomplished by repeated enemas and a nonresidue diet. If the distention cannot be relieved before the operation some means must be provided at a preliminary operation to relieve intestinal distention before removal of the growth itself is attempted. The greatest danger, of course, in this type of surgery is that of intestinal distention and peritonitis but if a case is handled carefully most of these dangers can be avoided.

Lastly, I wish to congratulate Doctor Dawson on his presentation of this timely subject.

Dr. Leigh F. Robinson, Ft. Lauderdale:

I want to thank Dr. Dawson for calling our attention to carcinoma of the colon. Of all discussions of this disease there is no doubt that the subject matter that Dr. Dawson has chosen is its most important phase. He has covered the field so well that anything I may have to say will be repetition. However, I wish to emphasize several points even though they have already been touched upon.

As the essayist has pointed out, the manifestation of the disease depends on the section of colon involved. The right half of the colon is the absorbing half because it has a common embryonic origin with the small intestine. If the disease is in the right colon the symptoms may simulate chronic appendicitis. At other times a secondary type of anemia without visible loss of blood may be the only manifestation. Rankin has emphasized the fact that it is not at all infrequent that the cause of a profound anemia may not be discovered until the X-ray reveals a growth in this part of the colon. Frequently the discovery of a mass in the region of the cecum directs the first suspicion to the colon.

On the other hand, carcinoma of the left colon is obstructive in type and the disease is manifested by varying symptoms of obstruction. The disease may be acute, sub-acute, or chronic. Due to the physiology of the left colon there is little absorption and therefore there is little anemia and dehydration. The lesions are usually "signet ring" type, which, due to the physiology of this section of the colon and character of bowel content, aggravates the tendency toward obstruction. The stenosis gradually brought about increases intercolonic pressure and produces more or less

pain because of the inability of the bowel to empty itself. Keeping in mind these facts of physiology and disease manifestation, one readily understands why malignancy of the colon may go unrecognized until it is far advanced. Any symptom or symptoms that call the physician's attention to the gastrointestinal tract or gall-bladder and that has persisted for a short time merits a thorough examination of the colon. Too frequently carcinoma of the colon is overlooked because the routine followed did not include the opaque enema and sigmoidoscopic examination. With the opaque enema and sigmoidoscope a diagnosis should approach close to 100%. Weber, at the Mayo Clinic in 1929, made a correct diagnosis in 99 out of 102 cases. The proctoscope will give a direct view of the bowel distal to the middle portion of the sigmoid flexure. The opaque enema is preferable to the oral meal. The latter is not only unsatisfactory but as emphasized by Rankin, aside from its lack of accuracy, is a positive menace in the presence of an obstructing growth.

These case histories reported bring out in bold relief the importance of thorough examination. They especially emphasize what may result if symptoms that sometimes may appear unimportant are not fully investigated. Dr. Dawson has served us well today if he has succeeded in driving home that "it is not difficult to make a diagnosis once cancer is suspected. The difficulty lies in making ourselves suspect it."

Dr. Geo. M. Dawson, West Palm Beach (concluding):

I have nothing to add. But I want to thank Dr. Snyder and Dr. Robinson for their discussions.

I thank you.

CESAREAN SECTION

A PHASE IN THE UNWISE MODERN OBSTETRIC TREND*

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Chicago, Ill.

The physician is the teacher of the lay public; as he leads so shall they follow. During the past generation some of the obstetricians high in authority have promulgated a new theory of obstetric practice which has been avidly accepted by too many physicians and then passed on to the credu-

lous public as a scientific gospel—that labor shall part of the parturient, and with an absence of all the throes of labor. Not one new method of accomplishing the delivery of a woman of her kind has been discovered in the last one hundred years. To be sure, obstetric progress has made possible, especially dependent upon the antiseptic and aseptic developments, a refinement of the technique of those operative procedures; the old masters had clearly laid down the indications for each and every one of the methods of delivery by artificial means—but in these modern times the indications have been so inordinately broadened that now indications are noticeable by their absence. Some ten or twelve *schools* have matured, the proponents of each having a propaganda which defends the routine application of the operation selected by them. As a result of this, many hospitals have an unconscionable array of operative incidences. Morbidity and mortality are directly commensurate to the degree of vaginal manipulation, and operative frequency. Rock states that some seventy-one per cent of all obstetric fatalities are sequential to operative interference: George Kosmak, before a senatorial inquiry stated that the high fetal and maternal mortalities in America were the result of indiscriminate operative interference.

Times were when the midwife was execrated for the meddlesomeness of her practices, and the high mortalities incident to her ignorance. Levy, in a survey of the conditions obtaining in Newark, New Jersey, found that the mortality of supervised midwifery practice was one (1), of the physicians one and a half ($1\frac{1}{2}$) and of the hospitals two (2)—these proportions are approximate. Mrs. Mary Breckenridge with her associated valiant midwives had one thousand confinements among the mountain women of Kentucky with no deaths from sepsis. These results are largely due to the fact that they practice an abstinence from injudicious molestation of the women they attend. I would impress upon you that morbidity and mortality are dependent upon, first, the seriousness of the complication which besets the obstetric woman and, second, upon the inherent dangers of the operation necessitated by that complication. The normal woman, or she who has a minor anomaly of parturition, has little or no danger of a lethal outcome for herself or her baby if the labor be sanely conducted. Her danger increases directly as the formidableness of the operation increases; trivial emergencies re-

*Presented, by invitation, before the Hillsboro County Medical Society, February 7, 1933.
be accomplished by the minimal of effort on the

quire minor procedures for their relief: the cataclisms of obstetrics may demand heroic surgery, but even here approved obstetric operations may, and often are, safer than a resort to the most formidable of all, the Cesarean section. If the authorities of America had devoted their thought and action to the promulgation of sound obstetric principles and practices these years we would not now be in this chaotic state which besets us.

Let me but enumerate the developments of these past thirty years. The styles of obstetric practice changed as wilfully as have the clothing of the women upon whom the operations were employed. Each and every proponent of the various procedures endeavored to consummate the delivery with the minimum of expenditure of time. These are not presented strictly in the order of their discovery but roughly in the sequence of their appropriation as a routine, or near routine procedure:

1. Hystereuryxis: advocated as a means of inducing labor at the whim of the advocates, the claim being made that it was so entirely innocuous that it was bereft of all untoward results; yet infections, most serious complications too frequently resulted. When these same women came to conservative obstetricians for later attendance we learned the tale of woe and catastrophe denied by the advocates.
2. Manual dilatation: some ten years ago an unthinking Denver physician advocated it anew as a wonderful and utterly safe method of delivery when combined with high or mid-plane forceps.
3. Bossi dilatation by means of a mechanical instrument.
4. Duhrrsen's incisions—not new but recommended by obstetricians of a hundred years ago.
5. Aconci's vaginal Cesarean section, but Duhrrsen claimed originality after Aconci had reported the first case so operated.
6. Symphysiotomy—Pubiotomy. Both died a natural death when it was found that Cesarean section carried no higher maternal mortality with a fetal mortality of one-half or less.
9. Routine forceps—on a basis that operative delivery was safer than spontaneous delivery.
8. Prophylactic Forceps: This comprised awaiting until dilatation was approximately consummated, then Souchard's incision, mid-

forceps or high-forceps, modified manual removal of the placenta, vaginal and cervical repair, utero-vaginal tamponade, and twilight sleep induced for twenty-four hours. The woman then awakened and clamored for the delivery of her child, only to discover that it was a day old!

9. Cesarean section:

a. Classic.

b. Low cervical Cesarean section.

10. Twilight Sleep. You all recall the furor that this anesthesia aroused. When it was discovered that fetal deaths were double and more than those when nitrous oxide and ethylene were employed, and when the founder of the Twilight Sleep Society succumbed under its use, it fell into righteous innocuous desuetude.
11. Episiotomy. Employed in as many as eighty per cent of deliveries (spontaneous and operative in primiparae and multiparae) when it is known that the incidence of spontaneous perineal tearing is only about fifteen to twenty per cent.
12. Routine version.

Each and every one of these operations has an abiding place in our obstetric practice. When rightly employed under appropriate indications they are of paramount importance to the women under duress; when indiscriminately and promiscuously advocated and used they are an excrescence on our obstetric escutcheon. With this portrayal of the modern trends I would now enter upon the discussion of the most important of these vagaries of obstetric practice.

CONDITIONS

In general surgery we must consider the contraindications to an operation: in obstetrics the *conditions* really cover not only the factors which contraindicate the procedure, but also those which make it permissible to be undertaken: in a delivery through the vaginal tract the cephalo-pelvis relationship, the station of the head, the condition of the membranes and of the dilatation of the os must be determining factors in the selection of one or the other operation. Supplemental to this must be the fetal presentation and position, condition of the vaginal tract, the contents of the rectum and bladder; the condition of the fetus—its viability, its immaturity and maturity will dictate the type of operation to be selected. It is not necessary to go into detail but some of these

conditions may be artificially overcome or corrected by an obstetric manipulation.

As we consider the conditions for Cesarean section we may disregard some of the above and others will obtrude themselves:

1. Indication: there must be a very pressing reason or reasons for selecting the abdominal operation; the sum total of those reasons must determine that operation to be less hazardous for mother and baby than any other procedure.
2. Condition of mother: she must be a "good surgical risk."
 - A. Heart must not be in a precarious state.
 - B. Kidneys must have good function or not be too badly compromised.
 - C. Lungs must not be too severely affected.
 - D. Exhaustion from a long labor should be absent.
 - E. Infection shall be potentially and actually absent.
 - a. Autogenetic infection absent.
 - b. Heterogenous infection absent; coitus shortly before operation, vaginal examinations jeopardize woman; it is foolhardy to assay a Cesarean section after vaginal delivery has been attempted and failed (forcep attempts, then version, or vice versa, is an evidence of error in judgment—to attempt vaginal delivery, then do a Cesarean is a real blunder.)
 - c. Membranes should be intact, or at most not ruptured for too long a period, diametrically opposite to the demand for all vaginal deliveries.
3. Condition of Infant: its heart tone must be regular.
 - A. The infant must be alive in most instances, or at least not be in sore jeopardy. It is a humiliating calamity to produce a dead born infant.
 - B. Absence of recognizable monstrosity (X-ray usually will determine whether or not it exists.)
 - C. Infant should be distinctly viable, or at least not too premature.
Remember an infant at term has over two per cent chances of being born dead; and two more per cent chances of dying before it is two weeks old; born alive;

twenty-five per cent of children will succumb before the fifth year, and fifty per cent chances of fading out of the picture before it is 16 years of age. Remember that a baby born alive has the same life chance of reaching 20 years as a person of ninety reaching one hundred years. Premature infants will die within the year in a great proportion. These figures determine the fact that economically, sociologically, in the value to her family and the state a woman, with a life expectancy of thirty and more years, is of greater worth than the mere potential existence of an unborn infant.

INDICATIONS

The primal purpose of a Cesarean section is to save the life of the infant, and secondarily to vouchsafe a happy outcome for the mother when her infirmities preclude a vaginal delivery. It cannot be too strongly stated that the Cesarean operation is more hazardous to the mother than any method of vaginal delivery, provided that the conditions which govern such obstetric delivery have been fulfilled. In their appropriate fields this applies to forceps, version, manual correction of mal-presentation and position, breech extraction, and that much maligned craniotomy or embryotomy on the dead child. Within its prescribed limitations such mutilating operation upon the dead child is the safest for the mother.

The traditional division of Cesarean indications into (a) absolute and (b) relative, satisfy all requirements.

Absolute Indications: These imply that no other operation will be of avail—from the very necessities no other procedure can accomplish delivery: *i. e.*, the jeopardies to mother and infant preclude other intervention.

1. Gross fetopelvic disproportion:
 - a. Contracted pelvis: below eight and a half ($8\frac{1}{2}$) centimeters in a generally contracted pelvis: eight (8) centimeters in a simple flat, or many rachitic flat pelvises.
 - b. Disproportionately large fetus: a greatly oversized baby creates an actual cephalopelvic disproportion in a normal pelvis, just as an average, even small fetus, may not be able to pass through the contracted pelvis. This condition of overgrowth of the fetus is relatively rare—large babies

commonly are carried by over-large mothers. My three largest babies weighed respectively $14\frac{1}{2}$, $13\frac{1}{2}$, and 13 pounds, yet all were born by spontaneous effort. This condition is often difficult of determination, even by most expert palpation, "impression" methods. X-ray mensuration of pelvis and head may offer most conclusive proof. Every obstetrician has seen instances where positive diagnoses were made of insuperable disproportion, only to have labors terminated without undue difficulty.

2. Tumors blocking the brim which cannot be dislodged:
 - a. Fibromata emanating from the lower uterine segment.
 - b. Prolapsed ovarian tumors (cystic or solid).
 - c. Neoplastic growths originating in the pelvis (osseous, or vaginal).
 - d. Rare instances of prolapse of normal or diseased viscera (kidney, etc.).
3. Occlusion of the pelvic soft parts by congenital defects, or accidental stenoses of the vagina or cervix which would preclude the production of a new parturient canal.
4. The scar of a previously Cesareanized woman, or a woman who has had previous myomectomies which involved the entire, or at least compromised most of the uterine wall. To these must be added women who have had ruptured uteri in previous labors. Rupture of the scar may readily follow an attempt at spontaneous labor. This danger is acute when Cesareans were performed previously for fortuitous, even spurious reasons, as it practically dooms such women to repeated Cesareans, otherwise unnecessary.

Each of these indications are worthy of separate dissertations, but are not germane to the subject in hand—the promiscuous and unjustifiable use of Cesarean for personal whim.

Relative or Fortuitous Indications: In the attempt to present any sort of coordinated outline I feel that I am in a sore quandary just as was the young man who promised to write his mother the first impressions he had from viewing London, but could not as there were so many houses he could not see the city. In the endeavor to present a resume I would have you clearly appre-

ciate that it must be in a broad abstract form: individual cases may have many obscure elements which only may be interpreted by the physicians who examine the patient—no verbal or written portraiture will quite give a photographic replica. You may appreciate the situation when you consider the monumental contribution on "The Survey of Cesarean Section in the Borough of Brooklyn," by Charles A. Gordon, under the auspices of the Brooklyn Gynecological Society, wherein were some eighty (80) different indications for the operation. Among these diverse reasons were many which would past muster before any court of obstetricians. Others were so specious, so purely imaginative and so without justification that they do not reflect credit upon the individuals who performed the operations nor upon the hospital which permits such practices. This latter stricture is equally tenable when we review other surveys which have been published from time to time in other communities.

RELATIVE INDICATIONS

That we may clarify the atmosphere I would define Relative Indications as being those which make it expedient to perform a Cesarean but do not preclude the performance of a vaginal operation.

- A. Minor pelvic contraction above the limits given under the caption of Absolute Indications. In this category are included some irregularly contoured pelvises which were barely suspected before X-ray came into being, but now are far more prevalently recognized since roentgenology has depicted them in the living.
- B. Central placenta previa.
- C. Certain cases of ablatio placentae.
- D. Certain toxemias of advanced pregnancy.
- E. Certain cases of heart disease. (Heart disease, per se, is not a justification, but when accompanied by other complications offers extenuation); minor pelvic disproportion; a severe toxemia; previa—any factors which probably would demand prolonged instrumentation.
- F. Few cases of ovarian tumors, fibromata which do not compromise the inlet. In general watchful expectancy should dominate the picture, the abdominal operation to be performed if crises arise.
- G. Primiparae who are in the fourth decade—probably their last chance of motherhood;

but mere age is no indication for a section—there must be strong contributory reasons which will hazard the birth. A woman between 41 and 45 will have the same ease or difficulty in a primiparous labor as she would have had at the onset of her child-bearing period, 16-20, barring the development of complications which may result from advancing years—as tumors, inflammations, etc. The dangers which beset elderly primiparous women are popular fallacies, but not substantiated by any careful statistical study.

A. Minor cephalo-pelvic disproportion, whether due to pelvic contracture or distortion, or dependent upon the presence of over large infants, may require a section. You will recall that Williams found that over half of all women with pelvic deformity delivered in Johns Hopkins Hospital had spontaneous labors, and some thirty per cent more were aided by obstetric aids not inconsistent to the safety of mother and baby. This being the case, I am firmly convinced that no minor cephalo-pelvic disproportion should indicate a Cesarean section until the patient has been given an *efficient test of labor* under the most conscientiously conducted safeguards. The test should continue until the os has become dilated, or until strong contractions prove that the head cannot descend and the os dilate. In times past, the dangers accruing to a woman subjected to a secondary Cesarean over those of a primary operation (in advanced labor in contrast to the performance before labor began) was startlingly material. Today, advanced labor is not a contra-indication, but the overt acts of commission and inexcusable omissions do play their part in jeopardizing the woman. I know no obstetrician whose knowledge is so developed, his diagnostic acumen so acute, that he can foretell whether or no a *given* head will enter and pass through the pelvis by any methods, whether it be with X-ray, or the impressment manœuvres of Munro-Kerr, Mueller, or the latest, that of Hillis. All are invaluable adjuncts, but are not infallible. They cannot take full cognizance of the mouldability of the head which only may be elicited by a test of labor. We all know the repeated instances of patients who were told they had insuperable obstruction to delivery, yet have supplied us with the humiliation of seeing them deliver themselves with surprising ease.

B. Placenta Previa Centralis. This complica-

tion of pregnancy most properly should be in the hands of the expert, but that is impossible outside of large metropolitan areas. For those who are not particularly skilled by training and opportunity, the wisest course is to use a *tight cervico-vaginal* tamponade until dilatation has been secured. This stops bleeding and stimulates contractions. When dilatation has occurred then do an internal version. This is not the best method, but is so for the tyro and inexperienced. For the skilled, Hicks' version is indubitably the best method. As the os is practically always dilated sufficiently to admit two fingers, the placenta should be perforated (if a border is not available), and the leg brought down. The use of the hysterectomy, large size, passed through the placenta when necessary, is allowed to remain until dilatation is suspected to be complete—then an internal version is done. As the bag may secure dilatation and be expelled in a very brief period it is imperatively necessary that the attendant and all the assistants (internes and nurses) must remain, *ready for immediate action*. During the interim between the expulsion of the bag and a belated version, the woman may bleed to death.

The first cardinal principle to follow is that the version shall be accomplished with as great celerity as is consistently possible—and the *delivery allowed to be consummated by spontaneous effort*. Rapid extraction inevitably will cause extensive laceration of cervix, and vies in danger to manual dilatation for previa. The placenta should be manually removed if it is not expelled at once by Crede—and the utero-vaginal tamponade applied. It must be accentuated that sepsis destroys about one-quarter of all women with previa who die, the three-quarters from hemorrhage before, during and after delivery—and cervical lacerations pay their toll to the two latter. Stratz, by the above methods has delivered about two hundred previas with one fatality—his fifty-fifth case.

Cesarean section may be indicated in the complete types, even rarely the incomplete forms, if the following conditions, one or more, exist:

1. Strongly contributory indications—pelvic deformity, even minor.
2. Presence of toxemia, heart disease, or other wasting diseases.
3. Pregnancy should be near term—the infant alive and in good condition.
4. Coital indulgence has not been practiced in relation to the onset of bleeding; vaginal

examinations have not been made, one for diagnostic purposes, with unclean hands by the original attendant.

5. Mother in good condition—has not had exsanguinating blood losses; every placenta previa case should have a blood transfusion before any operation, advisable even with minor blood losses.
6. Patient should be in a well appointed hospital with every facility for combatting anemia, or other emergencies.

A word regarding "rigid cervix" in connection with placenta previa. Rigid cervixes are rare under any circumstance, and are truly unique in connection with placenta previa. This is a complication which befalls the general surgeon or inexperienced practitioner, but rarely occurs in the practice of the expert. The cervix erroneously called rigid in obstetrics generally is merely one unprepared for dilatation; this is a near constant in all patients where there is interference with descent of the presenting part (contracted pelves, tumors in brim, etc., and all mal-presentations and positions) and placenta previa conforms to this rule; the attachment of the placenta to the lower segment determines a succulence, a softening.

C. Ablatio Placentae. The etiology of ablatio is still a moot question. Some, as Whitridge Williams, maintain that it is invariably a manifestation of toxemia, is always of the type of Couvelaire's utero-placental apoplexy. He was so imbued with this assumption that he recommended the routine Cesarean section. From my own experience with twenty-three instances of ablatio I am still strongly of the opinion that the etiology is trifold; (a) toxemic; (b) result of some utero-placental pathology without a toxemic element; (c) the result of some accident (mishap), an abdominal blow, severe fall, etc. It is, indeed, unfortunate that at present we have no infallible concrete clinical evidences which will positively permit us to differentiate between "a" and "b." The toxemic type will commonly show an elevation of blood pressure; more or less marked alterations in the urine, albumen, casts, blood, and high specific gravity. Williams will have it that the uterus is of a *ligneous hardness* to which I cannot subscribe, though it is rather characteristic when discovered. The only pathognomonic sign of the toxemic apoplexy is elicited by an inspection of the uterine peritoneum and broad ligaments which, if present, will show hemorrhagic areas. These hemorrhages are grossly macro-

scopic and microscopic. In my own twenty-three personally conducted cases all were delivered per vaginam except one frankly toxic case treated by hysterectomy. The first patient died as a result of the excessive blood loss; the eleventh patient died in a convulsion some ten hours after accouchment force; the twenty-third woman entered the hospital a week before term, without prenatal care, had double ablatio retinae, ablatio placentae, marked cardio-vascular break, and delivered herself within twenty minutes after entry. She had a minimal hemorrhage, but died some forty-eight hours post-partum "from the heart." Granted that all my patients were of the apoplexy type, which I believe is not true, gave a gross mortality of thirteen per cent. Therefore the nineteen who survived, delivered by vaginal methods, are proof positive that Cesarean section was not needed, neither was an hysterectomy an essential detail. As a result of Willson's paper the argument was advanced that hysterectomy was an essential part as the eighteen women delivered below died. This did not consider the many women who were afflicted, were delivered from below and recovered. Of his forty-two collated cases twenty-one were merely sectioned, the other twenty-one were hysterectomized with a mortality for the former of nineteen per cent and of the latter forty-seven and six-tenths per cent. To sum up, ablatio is one of the few indications of today which most expediently may be delivered by digital dilatation. version (forceps), with utero-vaginal tamponade. The exceptional woman should be sectioned.

D. The Toxemias of Advanced Pregnancy. In our nosology the toxemias of pregnancy are as much enigmatic as they ever were. In our modern interpretation of maladies which come within the category of toxicoses our scientific deduction has permitted a rational determination of the proximate etiologic field in which they lie—but that information is no more specific than it is for the allied groups of the non-pregnant woman, or man. At best, following the precepts of Brown-Sequard, they are autointoxications. I am quite convinced that these disease entities must necessarily be combatted by purely empiric therapy, just as is the case of the allied groups where pregnancy is not a complication until the specific etiology is found, and specific therapy discovered. We know full well that those dyscrasias, where gestation is not concerned, which are manifested by involvement of hepatic and renal dysfunction and pathology are not amenable to specific pro-

phylaxis, even though orderly living, wholesome exercise, rational dietary, abstinence of irritating condiments and strong drink go a long way towards a prevention. But, neither are these toxemias of the non-pregnant and pregnant barred by a specific prophylaxis nor cured by a specific therapy. For years I have maintained that one of the crowning glories of the modern medical practice lies upon the development of prenatal care. So convinced am I of this that I would declare that over half of all the amelioration of obstetric morbidity and mortality which has come to us within this generation has been due to this single contribution to obstetric progress. A survey on maternal mortality, covering seventeen states, which shortly will be released, demonstrates and substantiates the above statement in that maternal mortality is severed in two by efficient maternal care. It is easier to rake up the fallen acorns that the ground may be kept clear than years later to chop down the mighty oak. So, the toxemias of pregnancy, caught in their incipency, may be so treated that the fulminantly acute crises may be warded off—but the diseases themselves are not absolutely preventable. I know not one specialist whose acumen is so acute and his therapy during pregnancy so thorough that he does not have his definite incidence of toxic symptoms in his privately supervised patients. But, by the same measure, I know many expert specialists who have eliminated almost entirely the explosive stages and their dire consequences. The substance of this digression is that the profession has been accorded a grave injustice in the minds of the laity by the oft-reiterated statement that toxemias are absolutely preventable. Such exaggerated statements are not substantiated by fact.

Innumerable classifications have been offered for toxemias and in their complexity befog the situation. For practical purposes, they may be divided into two groups; determined by the dominating visceral pathology:

- A. Nephritic Toxemia, eventuating in an uremic state with or without convulsions.
- B. Hepatic Toxemia eventuating into a state of convulsion; this group largely comprises those cases which we call eclampsia. It would be well to discard the word eclampsia as the appellation of a disease and limit its use to its English equivalent, convulsion. As we now interpret it "pre-eclampsia" should be understood as the prodromal stage of "eclampsia"—the convulsive period.

These two groups may present variants in their several treatments, but essentially, and for practical purposes, may be considered collectively, in the absence of a specific entity. The greatest advance in the management of these groups, and particularly that of hepatic toxemia, was inspired by Stroganoff who first maintained that they were *medical entities*, and not amenable to surgical intervention. In turn, Couvelaire, Zweifel and our Whitridge Williams corroborated the Stroganoff dictum that the mortality of the convulsive stage was diminished by fifty per cent when surgical interference was eliminated. As I see it, the success of the recent approved methods of treating toxemias by means of glucose (with or without insulin), combatting acidosis by alkilines, magnesium sulphate, etc., lie as much in the absence of surgical intervention, as in the medical therapy.

The non-convulsive stage of these two groups demand rest in bed, absolute quiet, freedom from worry, properly prescribed diet and fluid intake, and combatting symptoms as they arise. The above suggested measures, magnesium sodium carbonate, glucose, will play an important part. The urinary out-put, its pathologic content, the blood pressure, the character and progressive changes of the symptom complex must be carefully supervised; periodic alvine discharge must be maintained. If in spite of all the most painstaking control, symptoms become greatly exaggerated drastic action may be, and often must be, seriously considered. The fetus and the placenta offer an intensely malign influence upon the progress of the disease. Their removal before fulminating symptoms develop will generally be followed by recovery; procrastination may determine one of the greatest cataclasms of obstetrics. Two things are open for consideration: induction of labor by means of the bougie, cervical tampon, hystereurynter, *each combined with the rupture of the membranes*; or a Cesarean section. If the termination is determined upon with sufficient anticipation, I am strongly inclined to believe that obstetric induction is the judicious step. My reaction changed greatly. Some years ago, when I induced labor—rather, tried to start labor and failed—at the end of forty-eight hours I was forced to dilate manually, then use high forceps, only to have convulsions develop when the patient was put in bed, and to have death supervene in a convulsion. Timely removal of the fetus safeguards it as the disease will almost inevitably destroy it if it remains in utero too long. In the presence of aggravated symptoms, and knowing

the uncertainty of reaction to induction methods, he is circumspect who will perform a timely section, provided the infant is still living. The removal of the fetus, or its death are great determinants for recovery; little or nothing will be saved by a Cesarean section if the baby be dead. Await spontaneous labor.

Convulsive Stage: The damage is done; surgery will accomplish little or nothing. The patient should be managed by purely medical methods. In my own conviction, the wisest method is to use a modified Stroganoff therapy, combined with the previously enumerated procedures; labor eventually will supervene. In the convulsive period the worst thing that may be done is a Cesarean section. During the operative era for "eclampsia" the mortalities for Cesarean section, vaginal Cesarean section, manual dilatation and extraction were respectively thirty-five (35), thirty (30), and twenty to twenty-five (20-25) per cent. Today, under medical treatment the mortality of the convulsive stage ranges from six (6) per cent under Stroganoff method to about ten (10) per cent under magnesium, glucose, alkalines—the elimination of the dire consequences of an operation on a woman profoundly poisoned, suffering from anhydrosis, anuria, and coprostasis—each of which is commonly produced by the paralysis of the splanchnic plexus sequential to an abdominal operation.

The relative mortalities of Cesarean section in the non-convulsive and the convulsive stages are presented in Table 1.

Other Reputed Indications: It would be impossible, even if time permitted, to cover seriatim all the indications which have been advocated as subjects for Cesarean section. May I be permitted to comment upon a few! The bug-a-boo of obstetrics has been the question of heart disease in obstetrics, inspired by the studies of Morrell Mackenzie, and McDonald, published many years ago. They only took cognizance of the severe types with badly broken compensation. In my experience, valvular leaks with a perfectly balanced muscular action are of slight significance beyond the fact of their recognition. It is only with those unfortunates who have badly decompensated hearts who need give us serious concern. Certainly such women need the wise counsel of the skilled cardiac specialist. It may not be debatable that if such women have strong indications of contributory obstetric problems which will give strong probability of a long drawn-out

and difficult labor she should have an opportune Cesarean section. In the absence of such strong contributory difficulties, especially in a multiparous woman, she should be permitted to go into labor with an eventual timely instrumental aid. My experience dictates that such women usually have comfortable labors. I am equally convinced that the sum total of stress upon the heart by the muscular effects of labor, the sum total of reaction from the labor pains are less than the shock from the abdominal operation, plus the three days of post-operative pains and discomforts.

Mal-Presentations and Positions: It would be quibbling to take issue with him who performed a section for mal-presentations in the face of such mechanical interferences that after the mal-positions were corrected a delivery of great difficulty would have to be consummated. But I do hold a strong brief against those who disregard all rules of obstetric procedure and perform the absolutely unjustifiable section for mere anomalies of position and presentation. Such inexcusable blunders as to section normal breech presentations when the Wiegand-Martin manoeuvre, external version, generally will secure a happy correction; when Thorn and Ziegenspecks manoeuvres will correct the face (or the brow); when manual rotation will correct a posterior position; all are evidences of errors of judgment or a seeking for crass notoriety.

To do a Cesarean for a dead baby, for twins (no engagement), hydrocephalus, uterine inertia, patient's choice, exploratory laparotomy, rigidity of the cervix may give excuse in the man's inability to cope with obstetric problems or reflect on his unwise tutelage, but they cannot be an expression of anything other than inexcusable blunders. The errors which a country doctor may commit away from all contact of skilled aid carries its own extenuation, and its own glory under the adverse surroundings, if victory is attained, but in a metropolitan area where trained obstetricians are rife such inexcusable transgressions are beyond the pale.

FREQUENCY

The incidence of Cesarean section varies with such latitude in different hospitals in the same city, and again in various cities, and among different physicians that we cannot accept the explanations which are so frequently bandied about. It is self-evident that in one hospital which does not ordinarily accept an obstetric clientele but

does receive a very few operative cases in that its operating room technique is exceptionally good may have a one hundred per cent Cesarean record. This is aside from the mark! That the variations are so enormous in large metropolitan hospitals which are fed by essentially the same type or types of patients cannot be swept aside that in one institution the men are specialists who have enormous numbers of patients referred to them for Cesarean section, or that the patients who face obstetric crises just naturally flock to the place where they can have an abdominal operation. The propaganda has spread so insidiously and so extensively these late years that the Cæsarian operation is the safest and best way to have a baby that the public, credulous and gullible as they are (exemplified by the near billion dollars spent annually on patent medicines, proprietories, and quackery) have been led to believe the teaching, and too many thoughtless physicians have likewise concurred in the belief. And they are contrary to the fact. Table 2 depicts this anomalous state of affairs. It is a far cry from an incidence of the physician who has one section in 4.8 patients; a teaching hospital which had a frequency of 1 in 6; another 1 in 12; and the hospitals which have 1 in 25, to the other extreme where the operation is performed 1 to 418 and 861.

The whole problem goes back to the opening sentences of this paper; it behooves us to develop an obstetric renaissance whence will come an observance of sound obstetric principles, when Shroeder's "watchful expectancy" again will prevail. It is a trite saying that we should "temper the winds to the shorn lamb." Why not accord the same mercy to the parturient woman and her child? The wise teaching should be that trivial obstetric ills should be relieved by minor forms of operative intervention, and to the obstetric calamities should be reserved the drastic surgery.

MORTALITIES

Every ailment which afflicts mankind has an inherent tendency to destroy. In one, this danger of eventual lethal outcome is so trivial that it may practically be disregarded; in another, the fact of the presence of the disease spells extermination. Just so, in obstetrics, some phenomena are of mere diagnostic interest; in others, they are veritable cataclisms. In the first, spontaneous termination of labor may be anticipated with equanimity; in the latter, progressively, as the jeopardy increases, there will be an augmentative demand for active intervention with its increasing

menace as the formidableness of the intervention advances. In passing through the gamut of operative obstetric procedures, from the simplest to the most heroic, there is a vested, inevitable, mortality in each and all, culminating in that for Cesarean section which carries a definitely material jeopardy of death, irrespective of the indication. Even in the most trivial of undertaking no man can gauge the extreme lack of resistance against bacterial invasion, susceptibility to shock, and idiocyncrasy to the anesthetic.

In Cesarean section, a number of factors influence the outcome of the operation:

1. The skill of the operator—the finesse with which he selects the cases appropriate for the procedure, and the time for undertaking the operation. Procrastination may rob the woman of every chance of life.
2. The general surgeon, no matter how great his renown and skill with the knife may be, is utterly incompetent to perform the section unless he has had a definite experience with physiologic and pathologic obstetrics. The subtle discrimination when and when not to do the operation is absent in his lore if he has merely an abstract knowledge. The success of a Cesarean depends more upon this discrimination than upon mere operative dexterity. A general surgeon who knows how to do an abdominal operation and does the section purely because the case was brought to him, when efficient obstetricians are available, is beyond the pale. My screed applies to surgeons in large metropolitan areas—not to men in small communities where vertiable obstetricians are not at hand.
3. The condition of the patient at the time of operation, her complication, are of paramount importance. Is she a good surgical risk with all the factors which connate it? Is she exhausted or not? Has she had questionable vaginal examinations? Is there the presence or absence of potential or actual infection? Has there been an attempt at vaginal delivery? Has she received adequate preliminary medical supervision and therapy appropriate for her malady? Have the membranes been ruptured for a protracted period? Have there been errors of commission and omission? Unless these have been properly answered disaster awaits the operator and his patient.

4. The environment in which the patient is at the time of operation: in a hospital where the incidence of Cesarean is of sufficient frequency that all the personnel are trained to give efficient aid, a perfect technique is in vogue is one thing. In the hospital where Cesareans are of such rarity that the personnel has had no concrete experience and training, and the operating room technique is indifferent is quite a different story. To perform Cesareans in the same operating room which is employed for opening boils, pelvic abscesses, carbuncles, etc., means disaster—and Cesareans must necessarily be so done in small community hospitals.

1. The skill of the operator: The reports on Cesarean section which emanate from city surveys, hospitals and individuals show an enormous variation in the mortalities of mother and baby; regional conditions, climate, racial types, etc., cannot explain it. It must be integral with the judgment of the men in selecting cases, their operative technique and skill, and the equipment of the hospital in which they work. It must be palpably evident to any one that something must be wrong when one institution will report a death rate of 12 per thousand, and then range upward to 70, 130, and 144 per thousand in community surveys. This is exemplified by the Houston figures (Table 3) where a group of experts had one death in 56 patients, 1.8 per cent, while the group of general surgeons and practitioners lost 17 patients of 51, 33.3 per cent. Further, it must be appreciated that he who operates where *indicated* will have a higher mortality than he who selects safe surgical risks, and probably does many operations needlessly.

2. The disease or complication which dictates the operation. It is self-evident that properly controlled cases of contracted pelves and pure fetal dystocia will have no inherent risks other than that inevitable risk which may befall any patient subjected to an operation, yet the former (Table 1) shows a variation in maternal mortality from 0.8 to 16.3 per cent, and a fetal mortality from 3.3 to 8.3 per cent. Yet, in Brooklyn, some 62 sections were performed for pure fetal indications, if you may call them such—hydrocephalus twins, mal-positions and presentations, "fetal disproportion," large baby, fetal distress, dead fetus, polyhydramnios with a loss of 7 (11.3 per cent) mothers, and 14 (21.5 per cent) babies. On the other hand, all those maladies and compli-

cations (toxemias, ante partum hemorrhages, etc.) which possess inherently a high mortality rate subject the patient to that risk of dying plus the inevitable risk of a Cesarean. I am very certain that the shock, paralyses of the emunctories (skin, kidney and bowel), and infection are of far greater moment in a Cesarean section than in any type of vaginal delivery, and this is especially true when we consider the hepatic and renal complications of obstetrics.

4-7. These are sufficiently specific that they require no further elucidation.

TABLE 1.
COMPARATIVE RISKS OF CESAREAN IN TOXEMIAS—NON-CONVULSIVE AND CONVULSIVE AND CONTRACTED PELVES.

TYPES	MATERNAL			FETAL		
	Number of Mothers	Number of Deaths	Per cent	Number of Infants	Number of Deaths	Per cent
Pre-eclampsia	46	4	8.7	51	7	13.7
Toxemia	41	2	4.9	43	7	16.3
"Other Toxemia" . .	19	1	5.3	19	4	21.0
Total Non-Convulsive Types	106	7	6.6	113	18	15.9
"Eclampsia"	100	27	26.0	106	28	26.4
CONTRACTED PELVES						
Chicago Lying-In Hospital	368	3	0.8	368	12	3.3
Hartford Hospital	166	6	3.6			8.3
Houston Hospitals, 1924-6	48	8	16.3	48	4	8.3
<i>Ibid</i> , 1927-9	51	3	5.9	51	3	5.9
City of Brooklyn . .	934	54	5.7	936	36	3.8

CHOICE OF TYPE OF CESARIAN SECTION

It is maintained, and statistical studies verify the contention, that the low cervical Cesarean section is less hazardous as regards morbidity and mortality than the time honored classic section. The one error in this contention lies in the fact that largely the figures of the former method are compared with the classic statistics of a past period which is manifestly unfair. You may recall that Whitridge Williams arbitrarily took the year 1912 as the line of demarcation between the "school period" (the time when men were learning how and when to do a Cesarean) and the time when sound indications and contraindications were definitely fixed. You must recall that before 1912 very largely Cesareans were performed by general surgeons who knew little or nothing about practical and theoretical obstetrics for it was the general practitioners who usually attended women in labor and these general practitioners very generally had no surgical instinct or training.

The divided responsibility between surgeon and practitioner could but compromise the issue of the operation. The new school of obstetricians is a development of the last decade; the obstetricians of today are both accoucheurs and surgeons. This has been of paramount importance in the development of surgical obstetrics. The operative technique of all hospitals has been materially bettered the last few years. There is no question but that improved methods of anesthesia have lowered

the mortality of every type of operative intervention. The improvement of the obstetric attendents themselves is amplified by the illuminating fact that in 1925, in Detroit, the community death rate for Cesarean section was thirteen (13) per cent, whereas, in 1930, it had fallen to four and forty-three hundredths (4.43) per cent. The only way to conclusively prove the relative merits of the two operations would be for some skilled operator to operate alternately without favor with one method and the other.

In contrast, the patients upon whom the low operation has been performed do run a more placid course—less pain, less gas pains, less nausea, less thermal reaction, and on the face of the facts with lower mortality, than those who are subjected to the classic operation of the past period. There is no question but the low cervical operation has certain inherent technical difficulties which must be mastered before the attendant may become adept; for the average operator it requires more time. Whether the low cervical operation gives a more firmly united scar than the classic is still open to question; whether that scar is less prone to rupture has not been conclusively determined. On the other hand it is self-evident that if trouble with the scar does develop it is more amenable to control than when the classic scar is placed in jeopardy.

TABLE 2.

RATIO OF CESAREANS TO TOTAL DELIVERIES

Hartford Physician	1: 4.8
Jefferson Hospital	1: 6
San Francisco Physician	1: 6
Buffalo Physician	1: 10
Boston Lying-In Hospital.....	1: 12
Chicago Lying-In Hospital.....	1: 30
Hartford Hospital:	
1922-6	1: 36
1927-9	1: 35
Houston Hospitals:	
1924-6	1: 36
1927-9	1: 35
Detroit Largest Hospitals:	
Harper	1: 32
Woman's	1: 45
Crittenden	1:100
Providence	1:203
Kiefer	1:247
Minneapolis:	
Swedish Hospital	1:418
Toronto:	
Burnside Hospital	1:861

The enormous variations must be explained more on the personal reaction, than necessity.

TABLE 3.
GROSS CESAREAN MORTALITIES

REPORTS OF	MATERNAL				FETAL		
	Number of Cesareans	Number of Deaths	Per cent	Number Per 1000	Number of Babies	Number of Deaths	Per cent
Chicago Lying-In	874	11	1.26	12.6	887	40	4.5
Phaneuf	418	21	5.0	50	423	25	5.9
City of Brooklyn	1806	129	7.1	71	1821	164	9.0
*City of Detroit, 1925 .....	....	....	13.0	130	....	....	12.8?
*Ibid, 1930	203	9	4.4	44	203	26	12.8
*Two hospitals of Houston, 1924-6	†104	15	14.4	144	104	15	14.4
*Ibid, 1927-9	154	9	5.8	58	154	15	9.7

*The figures given for Detroit and Houston demonstrate that there has been a marked diminution of mortalities for mothers in both communities: in the first, fetal mortality is unchanged.
†Of these 104 patients, 56 were operated upon by men specializing in Obstetrics, and surgery, with a mortality of 1.8 per cent: 51 by general practitioners with a mortality of 33 per cent.

SUMMARY

1. Cesarean section is not the innocent operation which so many have maintained.

2. In the hands of skilled operators its mortality is at least six times greater than that of all other types of delivery (spontaneous and operative) and rises to even twenty-five times the mortality of the community rate.

3. In the hands of the unskilled, untrained operators its mortality is enormous; in one city its mortality was eighty (80) times the maternal rate as a whole, and in another city it rose to ninety (90) times the usual statistics of the community.

4. Cesarean section is primarily performed for the preservation of the infant, yet generally the fetal mortality exceeds that of the rate for the community neonatal rate, and even is quadruple that rate in many quarters.

5. Cesarean section carries with it its own pathology—intestinal adhesions, ileus, adherence of the uterus to adjacent structures, and lowers the fecundity of women. On the average the Cesareanized woman produces 1.8 children, while other women have 3.5 children to the family.

6. Cesarean section for gross pelvic deformity carries its own justification, for in each succeeding labor the indication continues.

7. Cesarean section for fortuitous reasons which complicate the one pregnancy will not recur (eclampsia, ante partum hemorrhage, ovarian tumors, etc.), therefore places the woman in jeopardy for all subsequent labors by repeated sections.

8. In spite of certain figures to the contrary a woman Cesareanized once should have the operation repeated in each succeeding pregnancy before term. The danger of rupture of the scar is a vital issue. There are only a few exceptions to this rule—a woman who has had one vaginal delivery before the section, and if she is in a hospital with the “set-up” for an immediate operation if the scar shows signs of threatened or actual rupture.

9. The dangers of Cesarean section are so great that sentiment should demand that it shall be reserved for those women who imperatively need that she and her child may be saved.

10. It would be a wise regulation if hospitals should require that no Cesarean section, or other major obstetric operation, shall be performed until a consultation has been held with an approved authority.

11. Cesarean section has no place in the treatment of the convulsive stages of toxemias, for such are purely medical cases.

12. Most cases of placenta previa may be properly managed by obstetric measures; the rare central type may furnish the indication if all conditions have been met.

13. If we would attain that utopian state of bringing the maternal and fetal mortalities down to the “irreducible minimum” we must reeducate the physicians and the lay public to the realization of the fact that the greatest safety to mother and child lies in spontaneous birth, or the simplest intervention which will bring her an happy delivery.

ANNUAL MEETING
FLORIDA EAST COAST MEDICAL
ASSOCIATION
OCTOBER 27 and 28, 1933
MIAMI

HEADQUARTERS
BILTMORE HOTEL, CORAL GABLES

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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ADYNAMIC ILEUS

Adynamic ileus has long been the bug-bear of surgeons; dreaded as a post-operative complication; resistant to treatment and difficult to recognize early.

The best resume on this subject and of practical interest to the surgeon comes from the Department of Surgery, Tulane University School of Medicine and Charity Hospital, New Orleans, La. Ochsner and Gage¹ in a scientific paper based on animal and clinical experiments and a rather thorough review of literature, present a very clear-cut picture of this condition. Briefly, they summarize their findings as follows:

1. "The causes of adynamic ileus are varied. They may be intra-abdominal or extra-abdominal. The most frequent cause of adynamic ileus is exposure to air and manipulation during laparotomy.

2. Adynamic ileus occurs earlier post-operatively than mechanical ileus. It is characterized by the absence of colicky, intermittent pain. Plain roentgenograms of the abdomen are of inestimable value in the diagnosis of all forms of ileus.

3. The treatment of adynamic ileus varies according to the type. The prophylactic treatment consists of abandonment of preoperative and post-operative catharsis and the avoidance of unnecessary trauma and peritoneal contamination during the performance of a laparotomy.

4. Physiologic ileus which occurs for varying periods of time following all laparotomies is treated by withholding the oral administration of all substances until nausea has ceased, by the application of heat to the abdomen, and the administration of morphine. Water balance should be reestablished.

5. Severe adynamic ileus is treated by transduodenal decompression by means of indwelling nasal catheters and remineralization of the patient. Hypertonic salt solution ('hypertonic' Ringer's and 'hypertonic' Hartmann's solution) injected intravenously stimulate the intestinal movement in adynamic ileus. In severe cases one or more enterostomies are frequently necessary in order to decompress the dilated intestine. A splanchnic block (splanchnic or spinal analgesia) is often efficacious. Drugs are of little or no value."

Trauma and exposure during operation has long been recognized as one of the chief causes and gentleness in technique should be the aim of every surgeon.

The distinction between "adynamic" and "para-

lytic" ileus is not always easy. The surgeon, visiting his patient every day, is apt to lose his perspective. Some investigators object to the term "adynamic," claiming that no paralysis of the intestine exists. It follows that, in many cases early enterostomy will still be the most valuable therapeutic weapon.

Most interesting are the experiments in which they find that the post-operative administration of morphine causes an increase in 93 per cent of the observations and a decrease in none. This has also been demonstrated by Plant, Miller and other investigators.

In severe cases "hypertonic" Ringer's solution and "hypertonic" Hartmann's solution gave remarkable results. Hadin and Orr pioneered in this work when they showed that ileus brought about a hypochloremia and alkalosis. These solutions given intravenously replace the chlorides and, as Hughson and Scarff and others have shown, cause an actual increase in intestinal activity.

Needless to say, a number of patients with adynamic ileus will probably continue to die in spite of treatment but one feels more confident in knowing that a number of new efficacious weapons have been added to his armamentarium.

1. Ochsner, A., Gage, I. M. *Adynamic Ileus*, A. J. Surg., May, 1933, Vol. XX, No. 2.

SPECTACLES FOR THE POOR

It would be difficult to estimate the thousands of children in our state who need glasses, and are not able to purchase them. School examinations are made, and a notice sent home to the parents. As a rule, this notice is ignored for obvious reasons. Perhaps in a few instances they go to the oculist. The eyes are examined and a prescription for glasses given. Not able to buy the glasses, nothing more is done.

The cost of glasses has doubled and tripled in the past two decades. This increase is accounted for by the tremendous stride made in the improvement of the lens. No longer do we have to be contented with a small lens with the paste bifocal, but on the other hand a lens that is as near perfect as optical science has been able to develop. However this great increase is quite a hardship on the middle class, and results in the indigent going without glasses.

Not only do the children of pre-school and school age need glasses, but the parents or grandparents who have passed the age of forty or forty-five. Without glasses these older people can not read. If fitted with glasses, they could

not only pass away profitably their idle time, but keep posted on current affairs. After shelter, food, and clothing, glasses should come next for the various reasons stated above.

Some way should be provided to furnish these indigent people with glasses. Arrangements with optical companies could probably be made, whereby they would furnish the glasses on a cost basis. By doing this, the price per patient would be very small. Anything so important as the conservation of eye-sight should be the responsibility of the State or Federal Government, as well as that of the various charitable organizations. Whether the State should furnish them, the Federal Government, or charitable organizations, remains to be worked out. But surely these poor people need assistance.

AN UNSOLICITED TRIBUTE

A new note has been sounded by *The Morning Sentinel*, a daily paper published at Orlando. It will bring encouragement to many doctors who have been depressed by the seeming indifference of those to whom they have ministered; it will reassure those who have watched their patients drift to cultists whose promises have been more alluring and whose voices more stentorian; it will stimulate the efforts of our hard-working Committee on Public Relations whose response from the press has not always been that of co-operation.

The editorial referred to is, in a sense, a reversal of newspaper attitude as heretofore members of our profession have been wont to receive more abuse than praise because they have refrained from buying advertising space in the newspapers. It is, therefore, with gratitude and appreciation to this unbiased publisher in Orlando that the item is reproduced below:

"THE OVER-BURDENED CLASS

"Orlando's medical men will emerge from this depression unsung heroes of the day.

"Not only are they giving certain hours of their time to the free clinic as maintained by the Junior Welfare League, but each physician, meanwhile, has been forced to administer to his own particular list of patients whom he knew was unable to pay.

"Meanwhile, the medical men, as individuals, have found the financial sledding rather tough. Most of them have their personal obligations, their establishments, clinics and offices to maintain and those who hold their notes find little comfort in stories of ill-fortune to their clientele. The words 'promise to pay' do not seem to take into consideration a physician's responsibility to humanity.

"Of course we all expect better times now and we optimistically think this thing is just about wearing itself out. But should it continue into another six months, it is not unlikely that our medical men will be forced into

some sort of protective code which not only will insure them a livelihood but give them a co-ordinator to intercede between them and their patients and to, in some manner or means, extract some sort of financial exchange from them."

PHYSICIANS, HOSPITALS AND THE NATIONAL INDUSTRIAL RECOVERY ACT

Mr. Donald R. Richberg, general counsel of the National Recovery Administration, has given an opinion concerning the status of hospitals under the National Industrial Recovery Act. While it relates primarily to hospitals, it incidentally covers all professional men and organizations and all nonprofit organizations. Mr. Richberg says:

"Hospitals, not engaged in carrying on a trade or industry, do not come within the purview of the National Industrial Recovery Act, so as to come under the ordinary requirement of a code of fair competition. There is nothing to prevent any employer of labor outside of trades and industries, any professional man or organization, or any nonprofit organization, from signing the President's Reemployment Agreement and conforming to its provisions. This does not mean, however, that they are under any compulsion to do so other than that resulting from a desire to co-operate where appropriate, and so far as possible, with a general program of reemployment at shorter hours and higher wages. To the extent that labor is employed in occupations comparable with those engaged in trade or industry, it is of course desirable that similar conditions should prevail."

Outside of the trades and industries, therefore, a hospital, a professional man or organization and a nonprofit organization of any kind are under no legal duty to formulate and adopt a code of fair practice or to sign the President's reemployment agreement. With them the adoption of codes and the signing of the agreement are matters of circumstance and of patriotism. Whether a physician will or will not sign the President's reemployment agreement and display the official emblem in his office, on his automobile and elsewhere may, of course, be determined by the local medical organization in each community. Obviously, if a physician whose financial circumstances enable him without hardship to reduce the hours of his employees and to pay the wages specified in the President's reemployment agreement signs the agreement and displays the emblem, indicating to the public that he has done so, he may work an injustice on his financially less fortunate fellow practitioner. He would, perhaps,

leave the public in doubt as to whether their failure to display the emblem is due to lack of patriotism or to lack of professional or financial success. His conduct certainly would not constitute fair practice, which, after all, is one of the prime objectives of the National Industrial Recovery Act. If all physicians in a community cannot without undue hardship sign the President's reemployment agreement and conform to its exact terms as they are written, a local medical society that desires to co-operate with the President without violating the principles of fair practice may follow either of two courses: under paragraph 14 of the President's reemployment agreement it may ask for a modification that will permit compliance without hardship, or it may advise its members to enroll under the consumer's agreement and to display only the consumer's emblem.—*J. A. M. A., Aug. 26, 1933.*

REPORT OF FIRST POST-GRADUATE MEDICAL COURSE

As with all projects from which great benefit is derived, the work on the first Graduate Short Course for Doctors of Medicine was begun many months before the course opened on June 19, 1933. On December 6, 1932, Mr. W. K. Mitchell, Secretary of Short Courses and Institutes of the General Extension Division, University of Florida, addressed letters to seven university extension divisions requesting bulletins and other literature describing the extension courses for doctors of medicine which had been given in their respective states. Pamphlets, descriptions of courses, sample registration cards, and other material were received from the University of North Carolina, the University of Minnesota, the University of Oklahoma, and the University of Georgia.

This material was placed in the hands of Dr. G. C. Tillman of Gainesville, who, after studying it carefully, presented it to the Executive Committee of the Florida Medical Association for consideration, with the suggestion that a short course for the doctors of Florida be worked out on the basis of the available information to be given in co-operation with the General Extension Division of the University of Florida.

The reaction of the Committee was favorable. On December 30, 1932, Dr. Gerry Holden, President of the Florida Medical Association, appointed the following committee: Dr. T. Z. Cason, Jacksonville, Chairman; Dr. G. C. Tillman, Gainesville, and Dr. T. H. Bates, Lake City,

to act for the Florida Medical Association in perfecting plans for a graduate short course for doctors of medicine in Florida.

On Saturday, January 28, 1933, the Committee appointed by Dr. Holden met with Mr. Mitchell and B. C. Riley, Dean of the General Extension Division, to determine the policies, instruction, and other details in connection with the course. It was agreed to ask the Florida Medical Association to appropriate \$500.00 to cover the traveling expenses of bringing lecturers from northern universities and medical schools. A \$5.00 registration fee for each doctor was decided upon, this amount to be paid back to the Association to cover its appropriation. No one but doctors of medicine, duly registered in the State of Florida, were to be eligible to attend the course, it was agreed.

It was further decided that all contacts with lecturers and plans for instruction should be made by the Committee appointed by Dr. Holden, while the General Extension Division should concern itself with advertisement and promotion of the course.

A meeting of the Committee was held on March 26, 1933, to consider the countless details involved in the success of such an undertaking. On April 15, the Committee submitted the final draft of the program to the Secretary of Short Courses with instructions to proceed with publicity campaign, the ground work of which had been effectively laid already with an editorial in the Florida Medical Journal for March.

On April 18, 1933, a circular letter announcing the Graduate Short Course for Doctors in Florida was mailed to each doctor on the list of registered practitioners in the state obtained from the State Board of Health. This letter announced the topics to be covered and the lecturers on each subject and asked the following questions: "Will you attend the course?" "In what subjects are you most interested?" "What are your suggestions for the good of the course?" Approximately 150 doctors responded to this communication. Fifty stated that they would not be able to attend, although most of them expressed their favorable interest and offered suggestions. The remainder said they would come.

The plans were presented on the floor of the Florida Medical Association meeting in Hollywood, May 2, 3, 4, 1933. At this time the Association was asked to underwrite the project to the extent of \$500. This action was taken. At the Hollywood meeting bulletins containing the

program of the course were distributed. In addition to these channels of publicity, the Journal of the American Medical Association wrote for information in order that it might announce the course in a forthcoming issue.

On Monday, June 19, 1933, the first Graduate Short Course for Doctors of Medicine in Florida opened in the University auditorium. During the week of the course, 101 doctors registered for the lectures. Eighteen persons, largely instructors and members of the Committee, were allowed complimentary admission. Thus a total of 119 persons benefited from the course.

To entertain the doctors in the evenings several programs were arranged. University of Florida Night, June 19th, was broadcast over Station WRUF, the speakers being Dr. J. M. Farr, Vice-President of the University; Dr. T. Z. Cason, Dr. W. M. Rowlett, President of the Florida Medical Association, and Dean B. C. Riley. A smoker was held at the Gainesville Golf and Country Club, Tuesday evening, the 20th. On Wednesday evening, June 21st, the College of Pharmacy was in charge of the program. Interesting and valuable papers were presented by Dr. Townes R. Leigh (read by Dr. B. V. Christensen in Dr. Leigh's absence), Dr. W. J. Husa, and Dr. Christensen. A reception was given by the University Women's Club on Thursday evening. For Friday evening a lecture by Dr. Fred Albee had been arranged, but due to Dr. Albee's presence being required elsewhere, the program was omitted.

The lecturers of the Short Course were as follows:

Dr. Wayne Babcock, Philadelphia, Pennsylvania, Professor of Surgery, Temple University. (Dr. Babcock was accompanied by his assistant, Dr. Eugene Foy.) Surgery, 6 hours.

Dr. B. V. Christensen, University of Florida, Professor of Pharmacognosy and Pharmacology. Special lecture.

Dr. Cornelius G. Coakley, New York City, Professor of Otolaryngology, College of Physicians and Surgeons, Columbia University. Ear, Nose, and Throat, 3 hours.

Dr. J. C. Dickinson, Tampa, Florida, Chairman, Roentgenological Section, Southern Medical Association. X-ray, 2 hours.

Dr. Lucian Y. Dyrenforth, Jacksonville, Florida, Chief Pathologist, Riverside Hospital. Pathology-Interpretation, 1 hour.

Dr. P. A. Foote, University of Florida, Professor of Pharmacy. Special lecture.

Dr. W. J. Husa, University of Florida, Professor of Pharmacy. Special lecture.

Dr. J. Lee Kirby-Smith, Jacksonville, Florida, Dermatologist. Dermatology, 2 hours.

Dr. John A. Kolmer, Philadelphia, Pennsylvania, Professor of Medicine, Temple University. Medicine, 6 hours.

Dr. Townes R. Leigh, University of Florida, Dean, College of Pharmacy. Special lecture.

Dr. C. Jeff Miller, New Orleans, Louisiana, Professor of Gynecology, Tulane University. (In the absence of Dr. Miller he was represented by his associate, Dr. J. T. Witherspoon.) Gynecology, 3 hours.

Dr. J. R. McCord, Atlanta, Georgia, Professor of Obstetrics, Emory University and Representative, Children's Bureau, U. S. Department of Labor. Obstetrics, 6 hours.

Dr. W. A. Mulherin, Augusta, Georgia, Professor of Pediatrics, University of Georgia. Pediatrics, 6 hours.

Dr. Shaler Richardson, Jacksonville, Florida, Chief, Eye, Ear, Nose and Throat Service, Duval County Hospital. Ophthalmology, 1 hour.

Dr. Clayton E. Royce, Jacksonville, Florida, Chief Pathologist, Duval County and St. Vincent's Hospitals. Pathology-Technique, 1 hour.

Following the course, the majority of those attending made a point of expressing their enthusiasm to some member of the Committee. It was considered from the number of favorable comments that the course was a great success. Many offered suggestions as to how the course might be enlarged or improved. The members of the committee took the opportunity of talking the future course over with the physicians who had come down from other states to give the lectures. Plans are already going forward for a similar course next summer, the committee considering the suggestions and endeavoring to follow as many as prove practicable. The committee working on the Short Course for 1934 includes Doctors T. Z. Cason, T. H. Bates, and G. C. Tillman, who served this year, and Dr. M. Jay Flipse of Miami, who has been appointed by President Rowlett.

PRELIMINARY REPORT OF THE MEDICAL ECONOMICS COMMITTEE

The Committee is of the opinion that, in view of the fact that the medical profession has spent several centuries in educating the public to expect unbusiness-like methods and the donation of services without hope of pay or thanks, no con-

crete plan is likely to be worked out during this present year that will be wholly acceptable but it is expected that a start will be made on a general plan for the State Association to follow for the next several years. Any plan to be successful must be one that can be "sold" to the press, to the county and city authorities, to the people generally and to the medical profession as fair and reasonable. Unless we can so sell the plan, it must fail.

Since the medical profession is inclining more to the use of the newspapers for the education of the public in methods of health, it is believed good policy and only fair that the county societies buy advertising space from these publishers. It is the sense of this Committee, and it meets with the endorsement of the President of the State Medical Association, that the practice of the county societies in publishing a roster of its membership for the information of the public be approved and encouraged. The Committee feels that this gives the public an opportunity of determining who are reputable physicians and it would also serve in some measure to pay the newspapers for the considerable amount of space which they are donating, and will probably donate in the future, to our various educational features. The medical profession, as a whole, is inclined to entertain the idea that the press is hostile to the doctors. The Committee does not feel that this is true but rather that the publishers are right in their opinion that while the profession frequently asks for free publicity it hides behind an antiquated code of "ethics" when it comes to spending money for the sole commodity which a newspaper has to sell, namely, advertising space. It is our belief that if we meet these gentlemen half way they will co-operate to the fullest extent and be our most valuable allies at a time when we are going to need their support.

The Committee at this time is against any plan of socialized or insurance medicine with which it is familiar.

It is believed the plans should be inaugurated with the end in view of having county and city units pay for medical services to their indigents. The Committee looks with favor upon the plan of the county medical society contracting with these units for this work, the receipts being used for the good of the society, and the work being done by assignment of the members, regardless of their specialty, to special tours of duty.

Further, preventive medicine should be done by medical men. School and pre-school examinations should be done by doctors rather than by

nurses and the proper authorities should remunerate them for their services.

The Committee urges that cognizance be taken of a growing tendency on the part of hospitals and other organizations to exploit the physician and to invade his field. In many instances hospitals have organized clinics and use the physician, without remuneration, to treat, at least in some instances, his own private patients. Patients are being educated to go to the hospital for the treatment of an illness or accident rather than to their doctor's office. In furtherance of this scheme the doctor is permitting the hospital to call him to treat these patients at the institution instead of insisting that walking cases be sent to his office so that he may have at least some opportunity of collecting a fee.

The hospital, strictly speaking, is a hotel for the care of sick guests and, as we understand it, has no legal or moral right to practice medicine, yet they are constantly and increasingly usurping this function. In many hospitals, laymen, usually nurses, are used for the administration of anesthetics, dressing wounds of patients, taking blood pressure, doing basal metabolism, doing X-ray and clinical laboratory work and doing other things outside their province for the financial gain of the institution. For example, there certainly is no more important phase of the practice of medicine than administering a long anesthetic for a dangerous operation. Unquestionably, this should be done by a physician as a part of the practice of medicine and, where the patient can pay, remuneration should be his.

The Committee urges that the doctors stand loyally by each other and see that the work which is primarily theirs be given to them and that they do their parts in decreasing rather than increasing this definite exploitation.

With loyal co-operation and the use of the facilities at hand with discretion there is no question but that they can definitely control, in a satisfactory and fair way, all the practice of medicine which is their legal and moral inheritance and theirs alone.

It is requested that each county society appoint a Medical Economics Committee to co-operate with that of the State Association.

COMMITTEE ON MEDICAL ECONOMICS:

HERMAN WATSON, M.D., Chairman;
O. O. FEASTER, M.D., Secy.;
C. A. ANDREWS, M.D.,
J. L. KIRBY-SMITH, M.D.,
R. O. LYELL, M.D.

STATE NEWS ITEMS

Dr. and Mrs. Alvyn W. White of Pensacola announce the birth of a son, Alvyn W. White, Jr., on August 3rd.

* * *

Miss Louise King of Maysville, S. C., and Dr. George M. Dawson of West Palm Beach were married on August 26th at the home of Dr. and Mrs. William Y. Sayad, W. Palm Beach. After a honeymoon to the far west, Dr. and Mrs. Dawson will be at home at 100 Wildermere Road.

* * *

Dr. Clifford G. Blich, formerly of Jacksonville, has recently been commissioned a First Lieutenant, Medical Corps, Regular Army, stationed at Camp Beauregard, La.

* * *

Friends of Dr. W. M. Goodson will be pleased to learn that he has returned to Miami greatly improved in health. Dr. Goodson has spent three months at Hot Springs, Arkansas, Warm Springs and Atlanta, Georgia, recuperating.

* * *

Dr. J. G. Dupuis of Miami announces that Dr. James C. Rinaman has become associated with him in the practice of medicine and surgery, with offices at 6045 N. E. Second Ave.

* * *

Dr. Rosa L. Sullivay of Pensacola left September 1st for a combined business and pleasure trip to Chicago and to Coleman, Michigan.

* * *

Dr. Grady Page, formerly associated with Dr. H. Marshall Taylor of Jacksonville in the practice of otorhinolaryngology, announces his removal to Orlando where he has established offices in the State Bank Building.

* * *

Dr. Meredith Mallory and family of Orlando have returned from a six weeks' trip to the middle west. Dr. Mallory attended clinics in Chicago, as well as the World's Fair.

* * *

Dr. Allan T. Gurganious of Jacksonville, for some time associated with the staff of the Riverside Hospital, has resigned his post to move to Green Cove Springs. Dr. Gurganious will take over the practice of the late Dr. Francis P. Key of that city.

* * *

Dr. L. W. Cunningham of Jacksonville will attend the Congress of Radiology in Chicago, September 25-30.

Dr. Claude Anderson, formerly of Tampa, has taken over the management of Dr. T. F. Jackson's hospital at Dade City, as well as his private practice. Dr. Jackson has retired for one year on account of ill health.

* * *

At the request of the Duval County Medical Society, which will be host to the annual convention of the Association, the Executive Committee has definitely set the dates of April 30th and May 1st and 2nd, 1934, for the sixty-first annual meeting.

* * *

Dr. and Mrs. Henry Fuller of Mulberry announce the birth of a son, Henry Fuller, Jr., at the Morrell Memorial Hospital, Lakeland, on July 8th.

* * *

Dr. M. C. Wilensky of Chattahoochee has returned from a northern trip. He attended the annual summer graduate course in ophthalmology held at the University of Rochester. While in Chicago, Dr. Wilensky attended several eye and ear clinics and visited the Fair.

* * *

Dr. and Mrs. W. L. Tillis of Lakeland have returned from a three weeks' visit in Chicago and Rochester, Minn. Dr. Tillis took special work in eye, ear, nose and throat at the Mayo Clinic, and also attended clinics in Chicago.

* * *

Dr. W. C. Young and family of Chiefland spent the month of July in Chicago and Gary, Ind. Dr. Young attended clinics at the Cook County Hospital and also visited the Fair.

* * *

Dr. and Mrs. G. S. Osincup of Orlando returned September 10th from a month's vacation spent in Canada and Maine where they visited friends.

* * *

Dr. G. E. W. Hardy of Tampa attended the annual meeting of the 31st Division Staff at Fort Oglethorpe, Ga., from August 13th to 26th. Following this, he spent some time in Baltimore, where he visited friends and relatives.

* * *

Dr. and Mrs. S. F. Smith of Lakeland spent the last three weeks of August in the mountains of North Carolina. Dr. Smith then went to Philadelphia for a short course in eye, ear, nose and throat work.

Dr. J. S. McEwan of Orlando spent some time, during the latter part of August, at the Mayo Clinic, Rochester, Minn.

* * *

The following item has been submitted by our Orlando "correspondent": "Apparently vacation days are over as recently many of our summer wanderers have returned to Orlando refreshed and ready to make war on the depression: H. M. Beardall from the shrimp and clams of New Smyrna; L. C. Ingram from the heat of the north; Hewitt Johnston from the cotton fields of 'Old Alabam'; S. A. Shoemaker from the coal fields of W. Va., and W. H. Spiers from Chatahoochee where he had been renewing his acquaintanceship with many strange friends."

WILLIAM KILPATRICK LANE

Dr. William K. Lane, for many years a member of the Marion County Medical Society and the Florida Medical Association, died at Ocala, June 8, 1933.

Dr. Lane was born June 8, 1878 at Laurinburg, N. C. He received his medical education at the Jefferson Medical College of Philadelphia from which he graduated in 1902. Following his graduation he practiced general medicine at Goldsboro, N. C., from 1902 to 1910. In 1910 Dr. Lane returned to the Jefferson Medical College for a post-graduate course in eye, ear, nose and throat work. He came to Florida in 1911 and located in Ocala where, up until the time of his death, he practiced ophthalmology and otorhinolaryngology.

T. BYRON KING

Dr. T. Byron King of Gainesville, who was born in Belton, Georgia, April 29, 1886, died on May 7, 1933.

Dr. King graduated from the Liberal Arts department of Emory University in 1907 and from its medical department in 1912. Following his graduation, he practiced at Sandersville, Ga., until 1926 with the exception of his war service as first lieutenant. While at Sandersville, Dr. King had charge of the X-ray and radium department of the Rollins Sanatorium.

In 1926, Dr. King moved to Gainesville where he practiced up until the time of his death. He was a member of the Alachua County Medical Society, the Florida Medical Association, the American Medical Association and a Fellow of the American Radiological Society.

Attention is called to the Squibb advertisement on the page opposite the last page of reading. Squibb has had the position on our fourth cover but very graciously changed to the position opposite the last page of reading so that we might accept a new advertiser for the fourth cover position. We appreciate the courtesy that Squibb & Sons have shown in this matter and gladly acknowledge it in this public way.

* * *

The United States Civil Service Commission announces the following named open competitive examinations: medical officer, associate medical officer, assistant medical officer.

Applications for the positions of medical officer, associate medical officer, and assistant medical officer must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than September 28, 1933.

The examinations are to fill vacancies occurring in the Federal classified service throughout the United States.

In addition to the general register of eligibles, a separate register will be established for each of the following optionals: cardiology; child hygiene; eye, ear, nose and throat; genitourinary (urology); internal medicine and diagnosis; neuropsychiatry, pathology, and bacteriology; roentgenology; surgery (general or orthopedic); tuberculosis; and venereal disease.

The entrance salaries for these positions range from \$2,600 to \$3,800 a year, less a deduction of not to exceed 15 per cent as a measure of economy and a retirement deduction of 3½ per cent. When quarters, subsistence and laundry are furnished, a further deduction is made from the salary.

Competitors will not be required to report for a written examination, but will be rated on their education and experience.

Applicants must have had certain specified education and experience.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or custom-house in any city, or from the United States Civil Service Commission, Washington, D. C.

COMPONENT COUNTY SOCIETIES

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The DeSoto-Hardee-Highlands County Medical Society held its regular monthly meeting in

Bowling Green, August 8th, with the largest attendance of the year. An especially interesting program was enjoyed on which Dr. Ralph Greene of Jacksonville and Dr. H. Mason Smith of Tampa were chief speakers. Dr. Leland F. Carlton and Dr. A. R. Knauf of Tampa were also guests of the society.

ORANGE COUNTY MEDICAL SOCIETY

The regular August meeting of the Orange County Medical Society was held in the lounge of the Orange General Hospital, Wednesday evening, August 16th, with vice-president Dr. J. R. Chappell in the chair. Minutes of the previous meeting were read and approved. Dr. J. A. Pines of Orlando operated a moving picture machine for a long reel on "Living Tumor Growth Cells."

The committee to investigate the status of health insurance companies made its report and, following much discussion, it was suggested that the committee be continued.

Dr. Julian H. Buff, formerly of Atlanta, was made a member of the Society.

It was voted to insert in the Sunday issue of the *Sentinel-Star*, under a proper caption, the names of all the members of the Orange County Medical Society.

It was voted to communicate with the Orange County Dental Association, approving their efforts of purging their group of irregular operators and to lend support by refraining from referring cases to these irreconcilable individuals.

The report of the committee on investigation of and formulating plans for a collection agency received considerable discussion. The committee was increased by one new member and continued until the next monthly meeting when a final report will be made.

SARASOTA AND MANATEE COUNTY MEDICAL SOCIETIES

The Sarasota and Manatee County Medical Societies held a joint meeting at the home of Dr. J. E. Harris of Sarasota recently. Guests at the meeting were Drs. W. C. Blake, J. C. Dickinson, R. P. Henderson and R. G. Nelson of Tampa. Dr. Blake presented a very interesting paper on "Coronary Thrombosis." Refreshments were served following the scientific meeting. Members of these societies consider these social-scientific meetings as a splendid means of keeping the members interested in county society work.

WOMAN'S AUXILIARY

TO THE
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POLK COUNTY AUXILIARY

The annual picnic of the Polk County Medical Society and Auxiliary at the recreation house in Brewster was a delightful event of August 9th.

Dr. and Mrs. Stephen Gyland were the host and hostess, and they were assisted by Mr. and Mrs. Harry Meade. Mr. Meade, who is general manager of the American Cyaninid Company, escorted the visitors through the mine, pointing out the interesting facts of phosphate mining.

Later in the afternoon swimming was enjoyed, followed by a bountiful picnic supper. The evening was spent in dancing and playing bridge.

Guests present were from Lakeland, Bartow, Frostproof, Fort Meade, Mulberry, Winter Haven, Tampa and Brewster.

The next meeting of the Auxiliary will be in October at the Hotel Thelma in Lakeland.

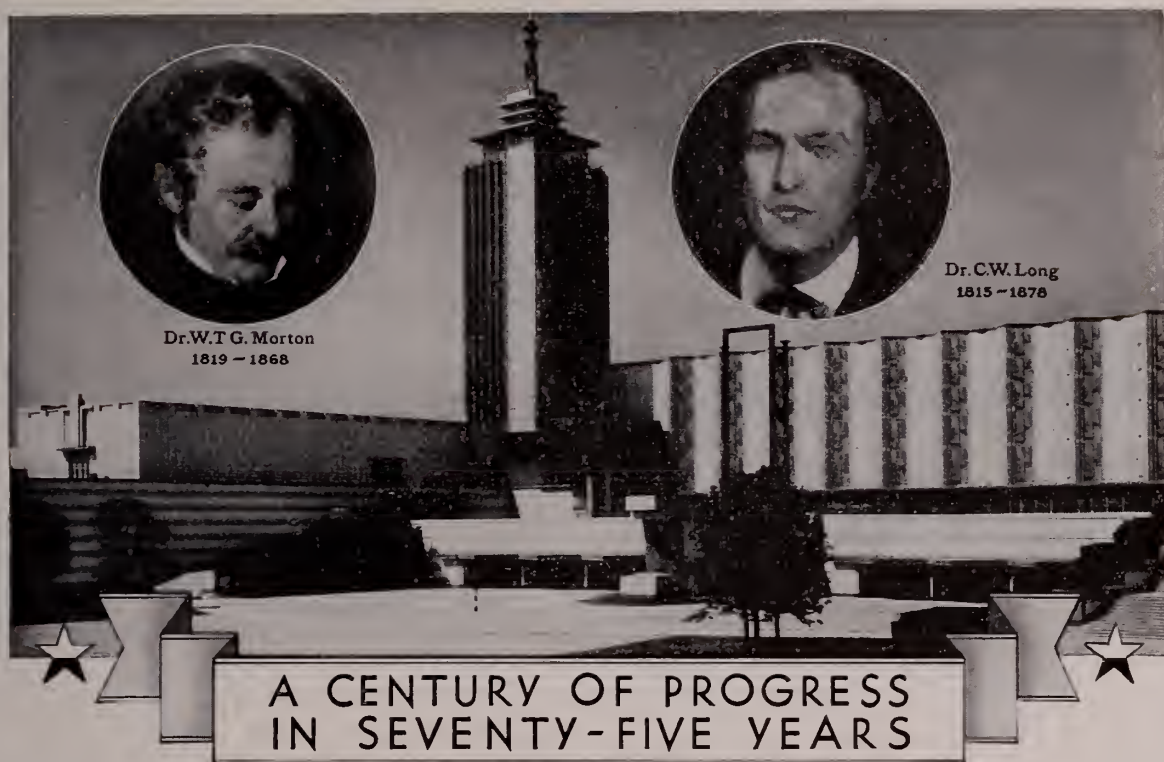
THE DOCTOR

Sir Luke Fildes' painting—"The Doctor"—is so familiar and yet how many know that Queen "Victoria the Good" had it painted in commemoration of the faithful devotion of the physician?

The picture shows a scene in a forester's cottage on the Braemar Estate, North Scotland, where Balmoral Castle is situated. The woman in the picture had been an old and favorite servant of the Queen.

After many years of married life, this little child came to them. She was stricken with a serious illness. The Queen telegraphed to London for her own physician. He came by special train and remained in constant attendance until after the crisis.

The child recovered and later the Queen requested the artist to paint the picture, the original of which hangs in the Tate Gallery in London.



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PLEASE MENTION THE JOURNAL WHEN WRITING TO ADVERTISERS

The California Auxiliary prize essay contest on "Educating a Doctor's Wife" was written by Mrs. A. Pearson of Los Angeles. The article is too long to quote in full but is given below in a condensed form:

"Doctors' wives are assuredly made and not born, for it would be asking too much even of eugenics to produce an individual with the required set of unique inhibitions and reactions. Granted then that she is to be made, the question arises as to whether the education should begin pre- or post-matrimonially, but one eminent member of the medical profession said, 'You'd better not educate them too much beforehand or they'll never marry doctors.'"

Thus we would suggest an institute for doctors' wives as part of the educational program of the Woman's Auxiliaries. The fundamental courses to be required may be divided roughly into arts and sciences. Mathematics as such, need have no place because the application of even simple arithmetic to a doctor's income is discouraging, not to say impossible.

Most important under the art course should be the study of the art of discreet speech, and must give instruction as to how to cope with the following typical questions: "What sort of operation did Mrs. Dash have?" "Does Mrs. Blank's little boy have anything catching?" "What does your husband charge?" Something special should be done for the chatty wife who mentions her husband's patients by name and ailment, with treatment outlined.

The required science courses should be two in number—phonology and relativity. By the former we mean instruction in the science of dealing with that little black imp so entrenched in the physician's household—the telephone. The doctor's wife must learn when to address it just politely, when cordially, when firmly and crisply. She must know the proper occasion for replying, "No. May I take a message for him?" and, "The doctor is out and cannot be reached for hours."

Relativity as one might expect, would be an elusive, intricate course. It would deal primarily with time, although space and distance would often be involved. For instance, the course should train the doctor's wife to estimate instantly the relationship between the time set for any social engagement and the relative number of minutes or hours due to elapse before the appearance of any given doctor. There would be many phases of this invaluable course.

Finally, we would suggest that there be no degrees granted. Generally speaking, the course will take a lifetime anyway.

* * *

Friends of Dr. Rufus Thames of Milton will sympathize with him in the death of his wife, which occurred on August 21st. Mrs. Thames was at one time secretary-treasurer of the State Medical Auxiliary.

ADVERTISERS' NOTES

INFECTION IN DIABETES

(From a Lilly Bulletin)

A recent number of Lilly's Physician's Bulletin contained an interesting paragraph on infection in diabetic patients. To those physicians who are not regular readers of this interesting bi-monthly publication we commend it to their attention.

"Infection — Infection exaggerates diabetes and in the untreated or improperly treated diabetic infection frequently precipitates coma. Infection temporarily reduces carbohydrate tolerance, makes larger doses of insulin necessary, and converts a mild diabetic into a severe one. If a diabetic whose urine has been kept sugar-free by proper treatment begins to have glycosuria on the same diet and insulin dosage as previously, the physician should immediately search for an infectious process even though the thermometer reveals the absence of fever. A 'trifling coryza' may endanger the diabetic's life unless its potential importance in reducing carbohydrate tolerance is appreciated. If an infection develops in a diabetic who is not taking insulin, insulin is likely to be required, at least for a time. If an infection develops in a diabetic who is already taking insulin, it is almost certain that a material increase in dosage will be necessary. Two, three, or even four times the usual insulin dosage may be required during this emergency period, and the interval between injections may need to be shortened. The urine should be examined several times daily, not only for sugar but for diacetic acid as well. Because the infectious process may begin to subside at any moment and the need for the additional insulin therefore rather suddenly disappear, the diabetic with an infection needs more than the usual amount of supervision. The carbohydrate content of the diet should not be restricted but the fat and protein may advantageously be reduced temporarily."

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VACCINATION AGAINST SMALLPOX

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A successful "take" of vaccine virus during early childhood may protect against smallpox throughout life; during epidemics the immunity gained from the primary vaccination can be increased to a more certain protection by revaccination.

The safest plan is to advocate, and carry out, revaccination of every person at 7 year intervals and when smallpox prevails in a community all persons should be revaccinated for greater safety.

The practicing physician of today has a higher duty and responsibility to his clientele than was assumed by the family doctor 50 years ago, with regard to protection against smallpox, because of the improved quality of vaccine now available.

Protection against smallpox and immunization against diphtheria are two thoroughly established measures for safeguarding public health.

The National Drug Company of Philadelphia will furnish physicians or health authorities with leaflets on Diphtheria Immunization for distribution to heads of families without advertising or firm mention. See their announcement on page 95 of this issue of the Journal.

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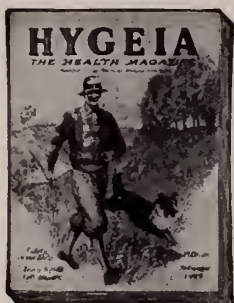
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SCHEDULE OF MEETINGS—COMPONENT SOCIETIES FLORIDA MEDICAL ASSOCIATION

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	55%
Bay	Allen, H. Miller, M.D., Millville.					17%
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		60%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	100%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	90%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	41%
Duval	F. L. Fort, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	72%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	60%
Hillsboro	C. W. Bartlett, M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	73%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	56%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	82%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	88%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	51%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	46%
Marion	J. L. Chalker, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	62%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	Louis Orr, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	73%
Palm Beach	James L. Carlisle, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	89%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	67%
Pinellas	Alvin L. Mills, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	76%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	83%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	34%
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	91%
St. Lucie-Okeechobee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	100%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	92%
Seminole	J. T. Denton, M.D., Sanford.	2nd Friday	8:00 P.M.	City Hospital Sanford		100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	Jas. L. Weeks, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	71%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	52%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.

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THE JOURNAL

— OF THE —

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 4

Jacksonville, Florida, October, 1933

Yearly Subscription, \$3.00
Single Copy, 30c

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¹J. Soc. Chem. Ind., 1923, 42, 185, 205.

*J. C. Drummond and T. P. Hilditch: The Relative Values of Cod Liver Oils from Various Sources, His Majesty's Stationery Office, London, 1930.

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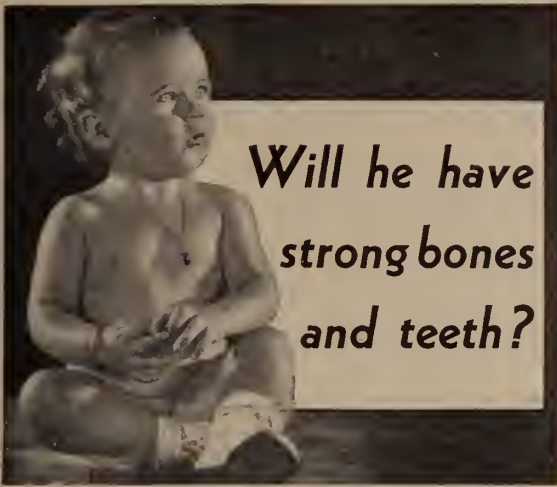
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, October, 1933

Number 4

PLACENTA PREVIA* HOMER L. PEARSON, M.D., Miami.

I will try in the next few minutes to give you some of the facts concerning the types, causes, diagnosis and treatment of placenta previa, and to do that in the shortest possible time it is necessary to omit practically all of the less important features.

Placenta previa demands the respect and tests the surgical skill and judgment of our best practitioners. It is not a disease as we commonly define a disease, but a mechanical complication of pregnancy that threatens the mother's life during the greater part of her pregnancy.

Too many women lose their lives because of this condition and it is due, in many instances, to neglect on the part of the physician in charge. Why? First, because we do not treat it with the proper respect; second, because we are too slow with our treatment. We are prone to wait a few days to see what will happen—and it usually happens. Let us not forget the fact that the early diagnosis of placenta previa depends almost entirely upon the general practitioner. He it is who first sees the condition and he, therefore, should be the one to apply the correct treatment at the earliest possible moment.

When we realize that placenta previa is probably more dangerous to the lives of our patients than appendicitis or ectopic pregnancy, we will lose fewer patients. When we realize that the time to treat placenta previa is as soon as the diagnosis is made, we will lose fewer patients. When we realize that the place to treat placenta previa is in the hospital we will lose fewer patients.

There are only two kinds of placenta previa which are of any concern to us, the complete and the partial. We have a complete placenta previa when the placenta completely covers the internal os. We have a partial placenta previa when the internal os is only partially covered by the placenta.

"The exact cause of placenta previa is unknown but a large number of women have previously had some endometrial disease or disturbance.

Multiparae are affected about ten times as frequently as primaparae. The more the number of children and the greater the rapidity with which the pregnancies follow each other, the greater is the incidence of placenta previa."⁹ In short, we might say that the causes of placenta previa are: first, anything that interferes with the normal development of the uterus; second, anything that interferes with the growth of healthy ovular and uterine decidua; third, anything that brings about a pathological condition of both the uterine muscles and decidua.^{1, 10}

In making a diagnosis of placenta previa, "I am not so much concerned with variety of previa but with the mere fact of its existence. I rely almost entirely upon the classic symptoms of sudden, causeless, painless hemorrhage, together with palpation of the lower uterine segment by rectal examination, and do not, in many cases, attempt to confirm the diagnosis by vaginal examination. I also believe that one hemorrhage is sufficient to make a diagnosis and do not wait for a recurrence. In this way many of the patients come to operation early and before they have been greatly shocked by the loss of blood."⁶

"The management of placenta previa aims at a safe delivery. To accomplish this one must control hemorrhage, combat shock, prevent infection and empty the uterus in the safest possible manner."⁷ "It is my invariable rule to empty the uterus at once in all cases of placenta previa, no matter what time of day or night or without consideration of the convenience of the operator. I try to choose the most conservative method for each case and find as time goes on that abdominal cesarean section seems to be the operation of choice in more and more of the cases."⁶ However, all the procedures will vary according to the conditions met in the individual case. So, in discussing the treatment of this condition, let us visualize cases under the different conditions.

I am called to see a woman who is in the last trimester of her pregnancy. I find that she has had a hemorrhage of about 500 cc. of blood, that she has had no pain, that the hemorrhage was sudden and was apparently without cause. She has a pulse of 100. She is somewhat excited but not very much alarmed because the hemorrhage has stopped. Rectal examination reveals a cervix

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

rather soft but not dilated. Fetal heart tones are heard and the placental bruit is heard just above the symphysis. A diagnosis of placenta previa is made. The patient is moved to the hospital where a classical cesarean section is done.⁸ While the section is being done a donor is secured and the mother is given 500 cc. of blood as soon as possible and a few hours later 1000 cc. of normal saline is given.

If upon arriving at the scene, I find the patient still bleeding profusely, I immediately give her chloroform or ether, manually dilate the cervix sufficiently to do a version, bring down one leg until the foot is at the labia and leave it.⁴ The patient is then taken to the hospital where restorative measures are instituted and this usually includes transfusion. Delivery is not completed until the cervix is completely dilated and she is in condition to be delivered. During and after delivery every effort is made to conserve blood. Other transfusions are done if necessary.

If, when I see the patient first, she is not bleeding much and can be gotten to the hospital quickly, I postpone treatment until she is in the hospital. Then if the hemorrhage is of sufficient severity to make it necessary to stop it right away, I either do a version as above described or insert a bag in the following manner. The patient is placed upon the table as for delivery. The labia and vagina are cleansed. When the cervix is exposed the anterior lip is grasped with a tenaculum. An opening is made with the finger or with a uterine dressing forcep, through the placenta, if the previa is complete or, if incomplete, the membranes are ruptured, near the margin of the placenta. The bag is passed through the placenta and immediately filled and enough weight attached to the tubing to control the bleeding. As the bag is born the fetal head is usually close enough behind to control the hemorrhage by pressure. In the majority of cases a safe delivery is made although usually following the loss of large quantities of blood the baby is stillborn. Also, in every case it is well to remember that it is always best to replace lost blood with blood. The treatment of placenta previa by the use of Braxton-Hicks version or by the use of the bag is recommended only in cases where it is impossible to do cesarean section.⁵

Since February 12, 1926, there have been eighteen cases of placenta previa treated at the Jackson Memorial Hospital in Miami. Of these, three were colored and fifteen were white. Five

were under 25 years of age, thirteen were from 27 to 42 years of age. There were five of the central type, four of the marginal type and nine on which the type was not recorded. Sixteen cases were in the last trimester of their pregnancy. One was four months and one was five months. Eleven were bleeding or had bled profusely. In two cases the bleeding was not profuse. In five cases the amount of bleeding was not recorded. These cases were treated as follows: four delivered by manual dilatation, version and breech extraction, with three maternal deaths and four fetal deaths. I don't know why the other mother lived. One was delivered by manual dilatation and forceps. Both mother and baby died. Two were delivered without treatment. Both mothers lived and both babies died. In one case the bag was used and the baby was delivered normally. The mother lived, the baby died. One died without delivery. In the case that was four months, the cervix was dilated manually and the uterus was emptied manually. The mother lived. In eight cases a classical cesarean section was done with no maternal deaths and four fetal deaths.

CONCLUSION

1. A sudden, causeless, painless hemorrhage in the last three months of pregnancy is placenta previa.

2. In the presence of sudden, causeless, painless hemorrhage in the last three months of pregnancy, do no vaginal examinations. They are unnecessary.

3. With a history of sudden, causeless, painless hemorrhage in the last three months of pregnancy, do not wait for further developments. They are often fatal.

4. In a sudden, causeless, painless hemorrhage in the last three months of pregnancy the treatment depends upon:

- (1) the condition of the patient;
- (2) the environment of the patient;
- (3) the experience and ability of the physician in charge.

5. The treatment of choice in sudden, causeless, painless hemorrhage in the vast majority of cases is classical cesarean section.^{2,3}

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DISCUSSION

Dr. C. J. Collins, Orlando:

Dr. Pearson has given us a very clear and concise paper on the subject of placenta previa.

I agree with Dr. Pearson that cesarean section is the safest and most conservative method of handling these patients in a great majority of cases.

The initial hemorrhage in placenta previa is only rarely fatal and if we would send these patients to the hospital without tampering with them and do a cesarean section while they are in good condition and free of infection we would considerably reduce our maternal mortality. There would be few neglected cases of placenta previa provided we remembered that there should be absolutely no expectant treatment for this condition. In neglected cases a preliminary transfusion will often be the deciding factor between a successful and fatal outcome. If we feel the chances are that our patient has been infected, it is better to do a low cervical or else a Porro cesarean. There are a few cases of marginal placenta previa with a dilatation of the cervix where we may consider the advisability of doing a Braxton Hicks version or using a hydrostatic bag. If the baby is dead a version is the method of choice, never completing the delivery until the cervix is completely dilated. Accouchement force has no place in the treatment of placenta previa. In the home the Braxton Hicks version is probably the method of choice. Occasionally it is necessary to use a vaginal pack to secure sufficient dilatation to do a version.

The third stage of labor must be handled very carefully to conserve blood or the tide will be turned against the patient. The patient should never be left until she has been delivered, all bleeding stopped and if necessary blood that has been lost, replaced by a transfusion.

We have been advised against the use of vaginal examinations in placenta previa. I believe if the initial bleeding is slight, that it is better to inspect the cervix with a speculum. I have a patient now in the last trimester of pregnancy, who two weeks ago began to bleed painlessly. Inspection of the cervix showed a cervical polyp

which was not apparent at the initial examination. If we can rule out the cervix as the cause of bleeding we can feel safe in making a diagnosis of placenta previa or premature separation of the normally implanted placenta. It is not very important so far as treatment is concerned to attempt to differentiate between these two conditions.

At the Orange General Hospital we have had twenty cases of placenta previa since 1926. Ten of these cases were delivered by cesarean section, and ten by various other methods. In the ten delivered by cesarean section there was one maternal death and two fetal deaths. The mother who died did not have the benefit of a transfusion which might have altered the outcome. In the ten cases delivered by other methods, there were four maternal deaths and six fetal deaths. This small series corroborates that of Dr. Pearson in showing that the use of cesarean section produces the best results in the treatment of placenta previa.

Dr. J. W. Alsobrook, Plant City:

Dr. Pearson did not bring out the fact that where there was partial dilatation or reasonable dilatation and engagement of the head, that a rupture of the membranes will oftentimes relieve the condition and the baby will be delivered in the normal way. That is where there is partial dilatation and engagement of the head in the upper strait. You will have no more trouble than in a normal delivery.

Dr. L. H. Octjen, Leesburg:

I cannot quite agree with this indictment of the hospital. If I have a case such as this, the place I want it is in the hospital. And I think the hospital is a great help to us in a good many ways, and particularly in this type of case.

I remember one particular instance in which I was a student. I recognized a case of placenta previa, brought it into the hospital and called the chief of staff. He did not get there quite as quick as I felt he should, and after waiting fifteen minutes with the woman on the table, I proceeded to deliver her myself, by podalic version. It saved the mother and the baby, and showed me that the time element is very, very important in this type of case. I was not prepared at that time to handle it as it should have been, being only a student, but I went ahead. The woman was bleeding and I knew something had to be done. That was the outcome.

I think all cases of this type should be in the hospital as soon as we can get them in, if their condition is such that they can be carried there. Otherwise podalic version is of course in order.

Dr. M. C. Wilson, Miami:

I wish to congratulate Dr. Pearson on his presentation of placenta previa. It is really a masterpiece.

Various cases require different treatments, but in the main Dr. Pearson's suggestions are certainly along the best lines. I heartily endorse his stand for more frequent use of cesarean section where it is feasible in central placenta previa.

I had one patient not long ago in which I criticize myself for not insisting upon a cesarean section. It was the last chance, in this case, for a live baby, and the baby was lost. The mother came through all right. One indication for cesarean section, we might say, is to have a little more hope for a live baby.

In doing cesarean sections I have learned, too, that we must give the hypodermic of pituitrin to cause contraction of the uterus at just the right time. If the uterus contracts too quickly you will squeeze the baby to death and the baby will die in spite of the cesarean section. We lost one baby due to that very thing. The mother was all right, but the baby died from asphyxia, caused by the contracting uterus before the section could be completed. There was no other cause to which I could assign that baby's death.

The main thing that I arose to say is this: Prepare your patient for these accidents of pregnancy and give a little regard to things of such paramount interest as loss of life of this woman and her baby. You will find that some women think a little bleeding is all right, and congratulate themselves for making some progress in labor. Caution these women to be careful about loss of blood. As much as one clot should be reported to the attending physician; no matter whether much or little, it should be reported. That is one thing we should all drill into our patients.

Early diagnosis as Dr. Pearson brought out and early attention oftentimes will save a life. I congratulate Dr. Pearson on his paper.

Dr. Homer L. Pearson, Miami (concluding):

I would like to thank the gentlemen for their discussion, and to thank Dr. Collins, especially, for bringing out the point of a speculum inspection of the cervix instead of doing a vaginal

examination. Polypi must be ruled out as a cause of bleeding.

There is another point that I wish to bring out: my professor of obstetrics, Dr. McCord, who is going to lecture on obstetrics at the post-graduate course in Gainesville next month, says that a woman in the last three months of her pregnancy who has a hemorrhage of one tablespoonful of blood, or more, without any apparent cause, should have a cesarean section.

I thank you.

CEREBRAL INJURIES OF THE NEWLY BORN*

JAMES H. FELLOWS, M.D.,
Pensacola.

My reasons for presenting a paper on this subject are:

1. The great number of infants and children seen with injuries to the brain and nervous system dating from birth.

2. To emphasize the importance of early recognition of signs and symptoms which these injuries produce.

3. To utter a word of caution in the hope that some may be prevented.

Birth injuries have not received the attention from the medical profession that they deserve. Research and study along this line will undoubtedly make clear some of the puzzling disabilities of later childhood.

Anatomy.—A brief discussion of some of the anatomical structures will probably help to explain the symptoms produced by these injuries. The cerebral hemispheres are developmentally immature at birth and are not needed immediately after birth. The spinal cord below the phrenic nucleus can be destroyed without immediate danger to life. (Crothers). Falx and tentorium are dural septums and are exceedingly important structures which separate the hemispheres; the falx is attached to the thin vertex above and the tentorium to the ridged base below and act as support for cerebrum and cerebellum. In this way they protect the vital centers which are located just below in the medulla oblongata. Crothers, of Boston, has called attention to and demonstrated that it is the laceration of the septums, especially the tentorium, which is responsible for many of the deaths in the newly born.

Many times in the autopsy room I have been

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

disappointed at the small hemorrhage found, overlooking the real pathology which was a tear in the tentorium, causing small hemorrhages, and allowing the upper brain to press upon the vital centers below.

The cerebrum will stand a great deal of distortion, due to moulding of the vertex, provided this molding and distortion take place slowly; if, however, the moulding is too rapid as in precipitate labors, or where pituitary extract has been used, these membranes are torn and hemorrhage ensues. I think it is generally agreed by men of experience that this drug (Pituitrin) should rarely be used in obstetrics other than in the induction of labor or expulsion of placenta; certainly not in the mechanism of labor if the interest of mother and baby are to be kept in mind.

The principal factors concerned in hemorrhages are tears of the dural septums in the newly born; as listed by Plass and Jean they are:

1. Unusually forceful compression of head as in difficult forceps.
2. Too rapid compression of head as in precipitate labor, and where pituitrin has been given, or in too rapid delivery of the after coming head.
3. Extreme compression of head as in poorly ossified heads and prematures.

They believe there is little evidence that prolonged labor itself offers any special pre-disposition to cerebral hemorrhage.

Hemorrhagic dyscrasia or hemorrhagic disease or hemorrhagic tendency are perhaps responsible for a number of hemorrhages, probably due to diminution in the prothrombin element derived from the platelets. (Lucas, Schloss, etc.).

Frequency.—It has been estimated that from 10% to 33% of all newly born babies have more or less cerebral injury. In the nature of things this is hard to prove. I am inclined to believe that the higher figure is nearer correct.

Many difficult feeding cases and other disabilities of later childhood give a history that would lead one to suspect birth injury.

Signs and Symptoms.—If one waits for convulsions and bulging fontanels to make the diagnosis as listed in text-books, "the house is on fire," and the patient is often beyond your reach. The earlier symptoms are, *restlessness* immediately after birth, cyanosis, asphyxia, a baby hard to resuscitate, screaming spells together with a history of rapid delivery, a hard instrument case, or a breach with difficult extraction of the after-

coming-head. For years I have constantly tried to impress upon nurses the significance of *restlessness* immediately after birth in the newly born. Bulging fontanels, convulsions are surely significant if present; a spinal or cisterna puncture will often show bloody fluid.

Diagnosis.—If one bears in mind the above signs and symptoms there should be little difficulty in recognizing this condition. Other factors that produce conditions similar to birth injuries are: congenital developmental anomalies, prenatal infections, consanguinity. Any newly born infant that is difficult to resuscitate should be suspected as having a cerebral hemorrhage, as should a baby that does not nurse well or refuse to nurse, or that has muscular twitchings. All with these symptoms should be carefully observed, a blood clotting time should be made and if symptoms justify, a spinal puncture performed.

Prognosis.—The prognosis depends on the location and extent of the injury. It may be generally stated that hemorrhages above the tentorium are less serious than those below this membrane. Sharpe demonstrated blood in the spinal fluid of many newly born babies, probably the result of hemorrhage. Plass & Jean, quoting Hemsath & Cenevan, have shown around 65% of their autopsies on babies dying of asphyxia to have microscopic hemorrhage in the medulla. Hemorrhage in the base is more serious than hemorrhage in the cortex; the prognosis will be influenced by the early recognition and prompt application of those measures necessary for the relief of the hemorrhage.

Treatment.—The treatment is prevention. So long as doctors are willing to accept the tradition that injuries are inevitable just so long will we have a high death rate in the newly born, and the myriads of after effects which occur in those who survive. To do good obstetrics one must not be in a hurry and always keep in mind the best interest of mother and baby.

If hemorrhage is suspected give 15 to 20 cc. of mother's blood, a cisterna or spinal puncture. Absolute rest and warmth are to be insisted upon. Give 1/8th to 1/12th phenobarbital. 1/150 to 1/200 gr. morphia, while condemned by some, surely seems to me to be logical, and has been very satisfactory in the cases in which I have used it.

Sequelae.—The sequelae will depend upon the location of the injury. Injury near the base may cause damage to the basal ganglia or the cortico-spinal tract or there may be meningeal

adhesions, scars, atrophy, etc., epilepsy, hydrocephalus, mental deficiency (20% to 25%) spastic paralysis, speech defects, athetoses, etc.

DISCUSSION

Dr. William W. McKibben, Miami:

This lucid and concise paper of Dr. Fellows is extremely timely, particularly as to treatment. He has aptly hit the nail on the head when he states, "the treatment is prevention." The injuries, the deaths, the myriads of after-effects must be combatted by good obstetrics.

There is a persistent increase in intranatal and neonatal mortality, and infant morbidity, incident to birth traumatism, as shown by reported death certificates. (Hugo Ehrenfest, *Amer. J. Dis. Child*; Feb., 1932.)

A comprehensive monograph by Erick Rydberg (*Lancet*, Sept. 24, 1932) considers that the conditions which bring about intracranial hemorrhage are general rather than local. Particularly significant is the rise of arterial pressure which Harvey Cushing of Harvard has shown to accompany an increase of intracranial tension. It is to this "general circulatory strain," and the overdilatation of capillaries which it occasions that hemorrhages into the venous system are attributed. Rightly, importance is attached to the sudden variation of pressure during labor. Rydberg expresses the opinion that lumbar puncture is of limited diagnostic value and of no therapeutic value.

We learn that the methods of peripheral stimulation formerly used to encourage respiration in the newly-born, such as smacking, pinching and cold-tubbing, have been abandoned because needed stimulus is chemical rather than physical. (*Lancet Editorial*, Feb. 20, 1932.)

Two years ago, Yandell Henderson of Yale advised that every new born baby should receive not over 10% of carbon-dioxide in oxygen for a few minutes several times a day, as a prophylaxis against atelectasis. (*Pediatrics in the Practical Medicine*, Series page 16, 1931.). We learn now (N. J. Eastman, *Bulletin Johns Hopkins Hospital*, January, 1932) that in asphyxiated infants the blood shows a greatly increased CO₂ tension, and a serum P. H. reduced to the lower limits compatible with life, and that the giving of CO₂ is not only valueless, but actually harmful. The primary blood chemical change is a reduction of the oxygen content of the fetal blood. Therefore the chief therapeutic indication is for oxygen

supplied by manual artificial respiration, or by mouth to mouth insufflation, neither applied too vigorously, however; or, oxygen may be given by tent, like the new type just installed at Jackson Memorial, or by the little portable Ohio Infant Resuscitation Outfit (Ekroth's 3305 S.W. 4th St., Miami), or by mask or nasal catheter (avoid injuring); or, the ideal method of a combination of oxygen with artificial respiration carried out by the Drinker respirator, (*Amer. J. Dis. of Children*, Nov., 1931) after first cleaning the mucus out of the air passages. The oxygen content being so low as to be inadequate for basal metabolic needs, the old methods of slapping, etc., produced depression rather than excitation of the respiratory center, and may even result in irreparable damage to the brain cells.

When it is indicated, for diagnostic purposes, a small quantity of fluid should be removed by means of a syringe and fine needle. Rydberg regards blood transfusion as the most effective form of therapy, and advocates the injection of citrated blood into the superior longitudinal sinus.

Isaac Abt maintains that there is a variable tensile strength of the cerebral blood vessel walls, illustrated in prematures and delicate infants. (*Pediatrics*, Abt. 1932, page 14).

Impairment of the function of the medulla, by pressure from above or by local injury, results in stillbirths or neonatal deaths (*Lancet editorial*, August 6, 1932) as brought out by Bronson Crothers of Boston. If much blood gets below the tentorium, the medulla may be embarrassed.

One well-known obstetrician of Boston (*New England Journal of Medicine*, 1932), for prevention of small hemorrhages into the brain, has injected 20 cc. of the mother's blood into the baby's gluteus maximus or into the loose fascia below the inferior angle of the scapula. This was done as routine at the time of delivery in 300 cases with excellent results; to the mother's inquiry (so as not to alarm her) the answer given was that it was routine only.

Necropsies following versions, extractions, and applications to after-coming-heads, showed the immediate cause of death was traumatic in 80 to 90%. (Ehrenfest, *Am. J. Dis. Children*, Feb., 1932). On stillborns and those dying within a few days of birth, 25% showed fatal lesions within the cranium and 25% more showed evidence of damage done (*e.g.*, edema, minor hem-

orrhages) not responsible, however, for death. Five per cent showed death due to hemorrhage into suprarenal glands, severe injury to liver, to respiratory center, and to spinal cord—leading to death in a few days.

There is another large pitiful group with whom we pediatricians must patiently work for months or years, some of whom might better be dead since the parents must bear the cross at such a great cost during their entire lives. First, asphyxia, anomalies of respiration, increased reflex irritability, convulsions, paralysis of extremities; later come sequelae of facial palsy, brachial plexus and phrenic nerve injuries, a spinal cord compression by hemorrhage or fractured vertebra, fractures of long bones or dislocations of joints, interpreted as congenital, but really the result of birth injuries. To prevent these unfortunate end-results, the role of the obstetrician is two-fold; to prevent trauma and to supply indispensable data for correct diagnosis; the former would reduce infant mortality, and better the chances of normal development. The relationship of traumatism to artificial delivery is unmistakable; the rapid growth of the operative trend in the obstetric practice of this country, alarming. Some reasons are justified, others intolerable. Whether the blame rests with physician or patient, excesses might be curbed by wide propagation among women, that ready compliance with ever-increasing insistence on a short and comfortable labor, is not fully compatible with the principles of sane conservative obstetrics, and inevitably implies certain risks to themselves and to their infants.

As Dr. Fellows so well concludes: "To do good obstetrics, one must not be in a hurry, and always keep in mind the best interest of mother and baby."

THE MANAGEMENT OF ACUTE SPINAL CORD INJURIES

J. G. LYERLY, M.D., F.A.C.S.,
Richmond, Va.

The main points to be considered when a patient is admitted to the hospital with a spinal cord injury are:

(1) general condition of the patient; (2) the extent and location of the injury; (3) the possible presence of associated injuries; (4) the evidence of compression of the cord; and (5) outline of treatment of the individual case and prognosis.

At the present time there is usually not much delay in getting the patient to the hospital after any serious injury. This is of importance in the presence of severe shock or compression of the cord where early and adequate treatment is urgent.

Shock is the first thing to look for when the patient is admitted to the hospital. With complete paralysis there is usually not much pain except for some local soreness at the site of the injury. The patient is otherwise fairly comfortable and the signs of shock are not manifest except possibly some lowering of the blood pressure. This depression of the blood pressure is frequently due to the vaso-motor paralysis associated with the spinal cord injury. The higher the level of the injury, especially when it involves the cervical cord, the lower the blood pressure is apt to be during the first few hours or days. During this period of time the blood vessels may have regained their tone and the blood pressure have risen to near normal.

The pulse rate is slow or normal even with a lowered blood pressure which is frequently not the case in severe surgical shock. As a general rule in an uncomplicated case of cord injury, shock is not a factor which would delay whatever treatment is necessary. On the other hand, there are sometimes associated injuries which would contribute to the shock materially and thus make it advisable to delay any operative treatment.

It is not always possible to determine the extent of the associated injury, especially when there are signs of involvement of one of the body cavities. In injury of the cervical spine the patient has often received a blow on the head, causing acute flexion of the neck and a fracture or dislocation in this region. The blow on the head may have caused a brain injury, thereby rendering the patient unconscious. In such a case it would be difficult to disclose a paralysis or loss of sensation because of lack of co-operation and the location of the lesion could not be accurately determined. A unilateral motor paralysis with contralateral loss of pain and temperature sense is found in a Brown-Sequard syndrome and points to a hemi-section of the cord. Likewise a Horner's syndrome may be demonstrated and give evidence of an injury of the cervical cord.

When there is a fracture of the low dorsal and lumbar region frequently the patient has severe

root pains with tenderness and rigidity of the abdominal muscles. This may be confused with an intraabdominal injury. The diagnosis may not be cleared up until the patient has been observed over a period of time and the urine examined for blood.

The history of the case is often of importance in determining the nature and extent of the injury. The patient diving into shallow water followed immediately by paralysis suggests a fracture of the cervical spine with cord injury. The history of any sudden acute flexion of the spine, whether it be in the cervical, dorsal or lumbar regions, followed by local tenderness, deformity or swelling over the spine, either with or without paralysis, should make one suspicious of a fracture of the spine.

The history of complete paralysis with loss of sensation immediately after the injury will give one some idea of the probable serious nature of the cord injury. On the other hand, the history of preservation of motion and sensation in the beginning, followed by paralysis which is increasing, is a very important symptom of compression of the cord. In such a case the unrelieved compression may cause irreparable damage to the nerve tracks in the cord through interference with its circulation or by pressure ischemia.

The neurological examination is of the most importance in determining the nature and level of the cord injury. The highest level of motor loss or of anesthesia is usually the deciding factor of the upper limit of the cord lesion. The X-ray examination may show the fractured vertebra to be at a certain level but the neurological findings disclose the cord injury at one or more segments higher than the bony injury would indicate.

Acute flexion of the spine may cause a compressed fracture of the body of the vertebra, rendering it wedge-shaped, or there may be a dislocation with or without a fracture. The X-ray examination may not show any changes in the vertebral column because the reduction has reduced itself by recoil.¹ In a severe dislocation the ligaments and inter-vertebral discs are lacerated and it is possible for a fragment of the cartilage to be protruding into the spinal canal and pressing on the cord. In a compressed fracture of the body of the vertebra a fragment of bone from the posterior part of the body may do the same thing. The fracture may involve the lamina and spinous process with forward

displacement, thereby causing some local compression from behind.

The X-ray examination is of importance in determining the bony deformity but it cannot show the nature and extent of the cord injury. It will not show any compression of the cord unless we infer it from some marked displacement of fragments of bone. It is possible to have a complete dislocation of the body of a vertebra without cord compression because the pedicles being fractured across the posterior bony arch remained behind and did not follow the forward displaced body. This condition has been observed in complete dislocation in the cervical region and without any compression of the spinal cord. The dislocation was reduced by traction on the head and operation was not required. With these facts in mind one can readily see how it is impossible to tell from the X-ray whether or not there is compression.

The best index of compression of the cord is shown by a spinal block at lumbar puncture. This test was first described by Queckenstedt² and now bears his name. It was first applied to spinal cord injuries as an indication for operation by Coleman³ and the technique was elaborated on by Lyster.⁴ In performing the test the patient is placed on the side in the horizontal position and the needle is inserted in the subarachnoid space at the usual interspace for a lumbar puncture. The pressure is recorded preferably with a water manometer since the fluctuations of the fluid level are more easily observed and interpreted. The pulse oscillations are absent in a spinal block while those synchronous with respirations are unaffected. On coughing and straining the pressure will rise from 50 to 100 millimeters of water. This is true whether a block is present or not. If both jugular veins are pressed on firmly for 10 seconds there will be a prompt rise in fluid pressure shown in the manometer of 100 to 200 mm. water. This is brought about by the fact that jugular compression produces a venous engorgement in the cranial cavity and the intracranial pressure is thereby raised and transmitted down the spine in the subarachnoid space. If there is compression of the cord the fluid pathways at that level will be blocked, and it will be shown by the absence of any rise of pressure in the manometer. The patient will then be said to have a positive Queckenstedt test or a spinal block.

With these findings one can infer that there is compression of the cord and that laminectomy may be indicated. One should be careful in doing the test or erroneous information may be obtained. It is important to have the patient relaxed and respirations free while making jugular compression. Straining and coughing may raise the pressure in the manometer even with a complete block and mislead one to infer that there is a negative Queckenstedt test. In the case of partial block the rise in pressure is delayed and of slight degree and after the jugular pressure is released there is a hang-up in the fluid level with a very much retarded fall to normal. In this case, operation is not recommended because the fluid pathways are not completely obstructed and there is probably no serious compression of the cord.

It is recommended by Coleman that when a positive Queckenstedt test is found, a few cc.'s of air be injected into the spinal canal below the block. This is done to see if the air will pass up to the head when the head and shoulders are raised or obstructed at the level of the block. It is used as a confirmatory test of a positive block.

A statement was made above that if a patient had a positive Queckenstedt test, he had compression of the cord and should be operated on. As a general rule this is true but exceptions must be made in certain cases. Each case must be considered more or less a law unto itself. Surgical judgment must enter as a factor when deciding whether an operation is indicated. If the patient has complete loss of motion and sensation coming on at once after the injury, and there is evidence of compression of the cord it may seem hopeless even with operation. One could not infer, however, that there is complete anatomical section of the cord, although there is complete physiological interruption. If it could be determined that there were an anatomical section of the cord either grossly or microscopically, it would do no good to operate. There is no regeneration of the cord after any part of it is cut in two. However, one cannot infer that the cord is cut in two simply because he has a complete paralysis and loss of sensation. These are physiological signs and the compression may block anatomically intact tracks. In partial lesions of the cord after the pressure is relieved by operation, improvement in motion and sensation has been seen showing that the injured

cord which recovered could not have been cut in two. If it is possible for improvement to occur when the physiological interruption is partial, it must be assumed that the same thing could happen when complete.

It has been shown by Allen⁵ that edema sets in early after a cord injury and becomes very pronounced within a few hours and that longitudinal splitting of the cord does not seem to check it. This being the case, if operation is indicated it should be done as soon as possible after the injury, providing the general condition of the patient is good enough to withstand it.

When the symptoms point to a complete transverse lesion, especially in the cervical region, and the temperature is high or rising, it is sometimes advisable to delay operation. Better results are obtained when the symptoms are those of a partial transverse lesion, and therefore the surgeon feels like being more radical when the conditions justify it in this type of case.

It is claimed by some that the greatest damage to the cord was done when the injury was received. This is very likely true and one cannot tell without direct inspection of the cord whether it is crushed, cut in two, or probably blocked from compression. Should the cord be cut in two it would be hopeless and no good could come from the operation except probably to give a more accurate prognosis. If the cord is compressed and does not look severely injured one cannot say that operation will not do good until sufficient time has elapsed for recovery to occur.

In addition to compression of the cord, laminectomy may be indicated in penetrating wounds of the spinal canal, especially when there are indriven fragments of bone or retained foreign bodies as in bullet wounds. The indication here for operation is to prevent infection as well as to relieve pressure. When the fracture or dislocation is below the first lumbar vertebra the paralysis is most likely to be due to injury of the cauda equina. Here we are dealing with the peripheral nerve rather than the cord injury and laminectomy is usually required to relieve the pressure or repair the damaged nerve roots.

A most important part of the management is probably the after-treatment and nursing care. The patient should be put to bed with the spine kept as straight as possible. With the fracture in the cervical region the neck should be slightly extended and sand bags put on each side of the head to prevent any undue motion. When the

position is changed the spine should be held straight and not twisted. If there is dislocation in the cervical region, continued traction on the head will frequently make the patient more comfortable and help to reduce the dislocation.

To prevent bed sores, which are notoriously common in these cases, it is necessary to change the position of the patient frequently. A water or air mattress should be used so as to equalize the pressure on all points. This tendency to bed sores is probably due to a combination of trophic disturbance from the cord injury and the patient lying in one position over a long period of time. To prevent this prolonged pressure the position should be changed every few hours followed by rubbing all pressure points with alcohol and dusting with zinc stearate powder. It is sometimes helpful to use air cushions and padded rings about the hips and ankles where the pressure is the greatest.

Another complication is a cystitis and sometimes a pyelonephritis. This is probably due to the introduction of bacteria at catheterization and the lowered resistance of the bladder wall consequent to the over-distention and trophic disturbance. The catheterization should be done under the strictest aseptic precautions and at regular intervals to prevent over distention. The use of a retention catheter is probably better as it will keep the bladder empty. The bladder should be irrigated once or twice daily with boric acid or some other mild antiseptic solution. If the urine is alkaline, the patient should be given acid sodium phosphate and urotropin to render the urine acid and antiseptic.

Probably the best way to handle the bladder condition is by suprapubic cystostomy. If this is done early infection is more apt to be prevented, and if done later an already infected bladder will clear up sooner. When there is complete anesthesia as high as the umbilicus, it can be done without an anesthetic and with scarcely no risk to the patient. One should frequently consult with the urologist and ask for his help and co-operation in the management of the bladder condition.

Usually no support of the spine is necessary as long as the patient is in bed and in the recumbent position. The spine should be kept as straight as possible at all times whether on the back or side. The general nursing care and attention to the hips and skin of the back can be better handled when there is complete paralysis

and loss of sensation if the patient is not encased in a plaster cast. Some support to the back or neck may be necessary when the patient is ready to sit up and the orthopedic surgeon is consulted and asked to manage this phase of the treatment.

The abdominal distention may be a troublesome factor for several days or a week. It is more apt to be worse in the higher cord injuries where the greater part of the sympathetic nervous system is involved. This is especially true in the cervical cord injuries where the distention interferes with the action of the diaphragm and an already embarrassed respiration caused by paralysis of the intercostal muscles. As the distention is caused by a paralytic condition of the intestines it is useless to give purgatives. It may be relieved somewhat by the frequent use of the rectal tube. Sometimes pituitrin or eserin hypodermically may expel some of the gas by causing contraction of the smooth muscle in the intestinal wall. A slow intravenous injection of 25% sodium chloride solution in 50 to 100 cc. dose is recommended by Semmes⁶ after other methods fail. Because of lessened toxicity a 50% solution of glucose in 100 cc. dose may be used instead. After the intestines have regained their tone the distention will be greatly relieved. Daily enemas or an occasional mild laxative may then be used for constipation.

During my practice with Dr. C. C. Coleman in Richmond, Virginia, we have had under treatment over 200 cases of spinal fracture or cord injury. A detailed analysis of these cases will not be made at this time.

CONCLUSIONS

1. The neurological examination gives us information of the degree of the physiological interruption but not the extent of the anatomical lesion of the spinal cord.

2. Compression of the cord cannot be determined from the X-ray examination alone.

3. A positive Queckenstedt test when properly conducted is the best index of compression of the cord.

4. A laminectomy is indicated when there is compression of the cord and the patient's general condition will permit it. Penetrating wounds involving the cord and injuries of the cauda equina may require operation without spinal block.

5. Bed sores and bladder infection are serious complications of cord injuries. After their appearance the patient may show retardation of

improvement and sometimes early death. The most skilled nursing care is necessary for the prevention of bed sores and the judicious use of catheterization under aseptic precautions or suprapubic cystostomy for prevention of bladder infection.

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DIVERTICULITIS AND CARCINOMA OF THE COLON*

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Diverticulitis and carcinoma of the colon are considered together because of the possibility of confusing them, particularly when they cause intestinal obstruction. Acute diverticulitis of the colon producing the picture of an acute surgical abdomen is the form in which the disease is usually met by the average physician and surgeon. Diverticulosis, the projection of small blind pockets from the wall of the intestine, is a common condition, and may be present in any part of the gut, but is found most frequently in the colon. Routine roentgen-ray examinations of 31,838 persons at the Mayo clinic showed that 5% of patients over 40 years of age had diverticulosis, 12% of whom developed diverticulitis. Such figures, however, probably are too high for the population in general. More diverticuli occur in the sigmoid flexure, and these are the ones most apt to be responsible for symptoms, probably due to the narrow lumen and liability of stagnation at this point. There are two kinds of these blind pockets, the congenital pulsion type, which are covered by all the coats of the intestinal wall, as in the vermiform appendix; and the acquired type, in which the mucous membrane alone pouches through the other layers of the intestinal wall.

The etiology of the acquired variety of diver-

ticulosis is not understood. Constipation is given as a factor, but does not explain why the condition is three or four times commoner in men than in women, although women are more subject to constipation. Diverticuli increase in frequency as age advances. Diverticulitis is encountered most often in rather obese men from forty to seventy years of age, who are heavy eaters. Perhaps distention of the colon by feces and gas plays a part in the causation. The weakest part of the intestinal wall is said to be on the mesenteric border, where the blood vessels enter, but most diverticuli are found on the opposite border of the intestine. The pea-shaped projections from the bowel may be contained in the appendices epiploicae, or are covered with fat, and may not be visible on gross pathological examination.

So long as the sacs empty regularly they produce no symptoms at all, or at most a slight feeling of fullness and discomfort, with gaseous distention, but it is easily conceivable how feces and bacteria and putrefactive material may become lodged in one or more pockets and cause irritation or infection. If only irritation follows the patient may experience a change in bowel habits, in which periods of constipation alternate with diarrhea, or there are incomplete evacuations. These signs also may indicate early cancer of the colon, particularly of the sigmoid, so that a patient so affected should be studied carefully, and not be sent away with a diet list and some mineral oil. It is unusual for mucus and blood to be present in the stools in diverticulitis. The sigmoidoscope may reveal carcinoma, but can hardly demonstrate diverticuli. Carcinoma involves the mucous membrane; diverticulitis does not.

The roentgen-ray offers the best evidence of the existence of diverticulosis and diverticulitis. Although these conditions have been recognized occasionally for more than seventy-five years, it is only since the perfection of means for visualizing the alimentary tract by roentgenology during recent times that the diagnosis and treatment of cases have become universal. Some diverticuli may be recognized by the barium meal, but the barium enema is a far more reliable diagnostic aid, and is safer if obstruction is present or threatens. The barium meal from above may precipitate intestinal obstruction in a constricted bowel. The barium enema should not be employed during an acute attack since the introduc-

*Read (by invitation) before Fourteenth Annual Meeting of Florida Railway Surgeons' Association, Hollywood, May 1, 1933.

tion of fluid into the colon might rupture a diverticulum which already is on the verge of perforation.

Infection of one or more diverticuli may initiate a group of symptoms and signs resembling an attack of left-sided acute appendicitis. Indeed, if the patient had transposition of viscera, the diagnosis of appendicitis would be justifiable. There is rather sudden onset of pain in the left iliac region, with tenderness, muscular resistance, fever, nausea, leukocytosis, and later the appearance of a mass, due to sigmoiditis, and more conspicuous than the usual inflammatory mass of appendicitis. The sigmoid mass may produce intestinal obstruction, and necessitate immediate surgical interference, or it may disappear as the symptoms subside with conservative treatment. If the mass can be felt for a longer or shorter time, as often happens, the probability of carcinoma is considered. No doubt such tumors have been excised with the impression that they were malignant, and brilliant recoveries have been reported; or the spontaneous disappearance of such a supposed cancer has given opportunity for various quacks and cults to gain credit for marvelous cures.

Since only a small proportion of persons with diverticulosis ever develop the symptoms of diverticulitis, it is questionable whether all those who, in a routine roentgen-ray examination, are discovered to have diverticuli, should be informed of the fact, for psychological reasons. Perhaps a diet, and proper habits of eating and evacuation can be prescribed without a complete explanation. If the patient has had an acute attack a very definite regime should be outlined, and overeating prohibited. Since barium given orally tends to remain in the diverticuli for one or two days, the administration of an ounce of the drug two or three times a week may prevent filling diverticuli with deleterious matter. In the presence of an attack of acute diverticulitis non-operative treatment is the choice unless obstruction or abscess formation supervenes. Many attacks subside with rest, relief of pain and the administration of fluids and glucose. Cases are on record in which laparotomy revealed a single large diverticulum, inflamed or filled with pus. The removal of such a lesion has effected a cure, but the excision of several inches of acutely inflamed and infected sigmoid is a procedure to be avoided. The first stage of a Mikulicz operation has been employed in some cases, generally with

a fatal outcome. Intestinal obstruction calls for prompt colostomy, which may result in a permanent cure, or a radical excision and anastomosis may be done later. Abscesses must be drained. Sometimes perforation takes place into the urinary bladder or other hollow viscus, or into the ischio-rectal fossa.

Six cases of diverticulitis are reported, five males and one female, all overweight, and all except one between forty and sixty years of age. The woman and one of the men have had only mild attacks, but pronounced enough to suggest roentgen-ray examination, which established the diagnosis. One patient has had three severe attacks without operation, and another patient one severe attack without operation. One patient died following two laparotomies, the first one to drain an abscess, and the second one two days later for intestinal obstruction. The last patient, thirty years old, was first thought to have cancer, on account of the development of a large hard nodular mass in the wall of the sigmoid, which could be felt through the abdomen and through the rectum. He was operated upon for obstruction, and colostomy performed. After one week he was having normal bowel movements through the rectum, and in three weeks the colostomy was healed and the mass had disappeared. Roentgen-ray did not demonstrate diverticuli in this case, but it is believed the characteristic appearance of the pockets was obscured by the formation of the inflammatory mass in the sigmoid.

It is difficult to prognosticate the outcome of cases of diverticulitis treated without operation, and of course it is not impossible for operated cases to have further trouble. Some patients who recover from attacks without surgical intervention remain well indefinitely, while others continue to have symptoms of varying intensity. Repeated severe attacks urge excision of the disease-bearing segment of gut, but so long as patients can be made moderately comfortable by conservative measures, operation should be postponed.

CARCINOMA OF THE COLON

A plea is made for earlier diagnosis of carcinoma of the colon. With our present knowledge of malignant disease, the most important single factor in prognosis is early diagnosis. While sometimes cancer and sarcoma develop so rapidly that it is impossible to recognize them early enough to offer any prospect of a cure, or even palliation, such cases are much rarer than the

slower growing types. This is true of carcinoma of the colon, and especially of the descending colon and sigmoid, which are the segments of the large gut most frequently attacked by the disease.

The profession does not seem to realize the high incidence of cancer of the colon and rectum. Considering these two parts of the alimentary canal as a system, it is involved in malignant growth even more commonly than the stomach. Knowing this fact, it behooves us to be more on the alert in the earlier recognition of the condition.

The handicap to be overcome by the average physician in making a diagnosis of internal cancer soon enough to offer the patient the chance of a curative operation rather than only a palliative one is that the physician has in mind the completely formed text-book picture of the disease. If we are to make progress in the results in the treatment of cancer, and give our patients the care to which they are entitled, we must learn to be conscious of the presence of the malady before the so-called "classical case" is established.

The commonest first symptom of carcinoma of the colon is a change in the bowel habits of the patient. If a patient who has been having one or more regular stools a day begins to have stools less frequently, or is subject to attacks of diarrhea, or has frequent small stools and feels that the bowel is not completely evacuated, such a patient should be studied for possible cancer of the colon. The influence of laxatives and cathartics in causing loose bowel movements in such cases should be eliminated. Attacks of abdominal discomfort and distention, and the presence and rumbling of gas in the intestine should further arouse the physician's interest. Stools should be examined for mucus, pus and blood, occult or visible to the eye.

When the disease reaches the stage of definite abdominal pain and cramps, and a mass is palpable, certainty almost supplants suspicion in patients of the so-called cancer age. With the assistance of the sigmoidoscope and roentgen-ray a positive diagnosis usually can be made, although sometimes exploratory laparotomy becomes necessary. If the lesion is not discovered until systemic signs are present, such as anemia, emaciation and cachexia, there is little hope of rendering surgical assistance.

Let us seek to recognize these cases before acute intestinal obstruction occurs, necessitating an emergency operation. Usually the ileostomy

or colostomy performed at this time is the only surgical procedure that can ever be done. When the pathological changes are allowed to reach such a degree that acute obstruction occurs, rarely is it possible to excise the growth with safety, or with hope of prolonging the patient's life materially.

In the majority of cases of colonic cancer seen by the average surgeon the early signs and symptoms have been ignored or unrecognized, and intestinal obstruction is the condition he is called upon to treat. Immediate drainage of the distended gut above the point of obstruction by colostomy or enterostomy may prove life-saving for a longer or shorter period of time, or may be entirely unavailing. Even if life is prolonged for months, it cannot be comfortable with the existence of a fecal fistula. A higher ideal should be the aim of the physician and surgeon. In a considerable percentage of cases it is possible to remove the tumor completely, and prolong life for years.

Four-fifths of the patients have cancer of the descending or left colon, of the hard napkin-ring variety, and prone to produce obstruction. The more solid character of the feces in this part of the gut, and its fixation at certain points, increase the tendency to obstruction. The sigmoid is the portion most liable to be involved, and the splenic flexure the least. Cancer of the cecum and ascending colon occasionally causes obstruction by volvulus or intussusception, but lesions in the right colon generally are large and soft and give rise to symptoms of anemia, intoxication, and dehydration from loss of blood. Metastases spread far more rapidly from this form of malignant growth in the right colon than from the hard occluding variety usually found in the left colon. However, the cecum and right colon, on account of their mobility, are better adapted for radical excision than the more fixed, less accessible, sigmoid and left colon.

While the operation of enterostomy or colostomy for intestinal obstruction ordinarily is not attended with difficulty, the radical surgical management of the case requires sound judgment and more than average skill. Usually a preliminary enterostomy or colostomy should precede the excision of the tumor; sometimes such a step is unnecessary. The kind of anastomosis to perform after excision always is a problem, about which the most experienced surgeons disagree. Some advise end-to-end anastomosis as the rou-

tine procedure, others prefer lateral anastomosis, and others the end-to-side method. An operation of the Mikulicz type is advocated by some, and condemned by others. Too frequently, although the growth can be removed satisfactorily, it is so low in the sigmoid that anastomosis is impossible, and the patient must be left with a permanent colostomy.

The operative technique to be followed must be decided by the surgeon in each individual case. Some form of aseptic anastomosis is desirable, but D. F. Jones,¹ who writes and speaks so well on the subject, believes that the maintenance of adequate blood supply and the relief of the pressure of distention on the line of sutures is more important than the type of anastomosis. The blood supply is less apt to be damaged by lateral anastomosis than by end-to-end anastomosis, and pressure on the sutures may be diminished by a temporary enterostomy or colostomy above the point of anastomosis. W. J. Mayo² cheers us with the observation that all enlarged mesenteric lymph nodes encountered in operations for carcinoma are not necessarily malignant, and that demonstrable metastatic involvement of other organs should not always deter us from attempting to remove the original tumor. Death from metastasis usually is less painful and less distressing than death caused by an unremoved primary lesion.

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PRIMARY CARCINOMA OF THE FALLOPIAN TUBES

REPORT OF A CASE

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The fallopian tube is less often attacked by malignant change than is any other structure of the female pelvic anatomy. Carcinoma is the most frequent primary malignant neoplasm to which the fallopian tube is subject.

With the advent of more frequent and more thorough pathologic examinations, which established the facts that tubal carcinoma could be primary, presents a typical cellular picture and is a definite entity, more and more cases were recognized. Previously it was considered secondary to some pelvic or abdominal malignancy.

In 1847 Renaud reported the first case of

malignancy of the tube of which there is record and described its macroscopic appearance which, according to Holland, indicates that it was primary in origin. The second case was presented by Orthmann in 1888, who gave us the first accurate and reliable description of primary carcinoma of the tubes. Doran, Kaltenback, Rottier and Tuffier reported the third, fourth, fifth and sixth cases respectively between the years 1888 and 1894. From this time until the present an increasing number of cases have been recognized and reported so that now over two hundred have reached the literature. This number, however, is minute in comparison to the actual number of gynecological cases treated over the same period of time. At the Mayo Clinic between the years 1910 and 1928 there appeared nine cases of primary carcinoma in ten thousand completely removed tubes. In over thirty-two thousand gynecological cases treated at the Johns Hopkins Hospital up to the year 1927 only four cases of primary carcinoma had been found. The condition, therefore, remains a rarity and the increase is undoubtedly more apparent than actual.

AGE INCIDENCE

Just as in most other malignancies, there is an increase in the number of cases as the fifth decade of life is approached and a corresponding decrease that follows this period. Over fifty per cent occur in this decade. The youngest patient reported (Bower and Clark) was twenty-five years of age, the same as the case herein reported, and the oldest (Mantel) seventy-three years.

ETIOLOGY

The etiology of tubal carcinoma is as obscure as is that of any other malignancy. To Sanger and Barth and Doran and Fearn go credit for the two most prevalent though much discussed and criticized theories. The latter two men believe that primary tubal carcinoma develops from a previously existing benign papilloma, frequently in the presence of an inflammatory process but not as a result of it. Sanger and Barth, on the contrary, stated that primary carcinoma develops from long standing chronic salpingitis and that the papilloma, while sometimes an intermediary stage, is unnecessary to the development of the malignancy. It has recently been argued by Eckardt and Frieden-heim that the inflammatory process might be the result of, and not the cause of, the malignancy and that if malignancy were a factor there would be more bilateral carcinomata. Only sixty-nine

cases or thirty-three per cent of the total number reported are bilateral. Wechsler and Vest, after carefully studying case reports and microscopic descriptions, concluded that inflammation played a very minor role, if any, in the development of tubal malignancy. Callahan reported a case of primary carcinoma of the fallopian tube associated with tuberculosis and found six other authentic cases. He concluded that because tuberculous salpingitis is not uncommon and carcinoma is rare that the association in these cases was coincidental. The embryonic rest excitation theory as discussed by Biar in his thesis cannot explain carcinoma of the fallopian tube because the microscope, particularly in the early cases, clearly demonstrates a primary disturbance in the epithelium of the lumen of the tube.

PATHOLOGY

The classification of the histological pathology of the primary growth as published by Sanger and Barth in 1895 is today retained by most writers as authoritative. According to this classification the two types are the purely papillary form and the papillary-alveolar form. Generally, both types are found in the same section, particularly when the wall of the tube has been invaded to any degree. The histology of the purely papillary form is a delicate connective tissue framework with usually a reduplication of the epithelium. The cells vary in size, shape and staining qualities and contain large nuclei and an increased amount of chromatin. The stroma is usually infiltrated with small round cells. In the papillary-alveolar type there is an apparent fusion of the papillae with deeper invasion of the muscular wall, solid columns being found even under the serosa. This form, therefore, has a much greater tendency to spread to the peritoneum or metastasize to the retroperitoneal lymph nodes.

A few cases of acanthoma due to metaplasia of the cylindrical epithelium have been reported.

When viewed at operation the gross appearance is not characteristic and resembles very much a chronic inflammatory condition. About one-third of the cases are bilateral. The middle and outer thirds are enlarged to form a mass not unlike a hydrosalpinx or a pyosalpinx. The ostium of the tube is frequently closed and the corresponding ovary frequently adherent to form a tubo-ovarian mass.

SYMPTOMS

The symptoms are not characteristic and are practically as one finds them in any number of

other gynecological conditions. Vaginal discharge, abdominal pain, and menstrual irregularities are the common complaints. The pain, usually low in the abdomen, is generally on the side of the lesion and varies in character and intensity. The most frequent single complaint is metrorrhagia, the type of which does not distinguish tubal malignancy from pathology in the uterus. During the later stages it is not uncommon to have urinary symptoms, gastro-intestinal disturbances, general weakness and loss of weight.

PHYSICAL SIGNS

There are no physical signs by which one can do more than suspect carcinoma of the tube. The only sign that can be considered in any degree characteristic is the nature of the discharge. This is frequently watery and straw colored but is modified by whatever condition co-exists with the malignancy.

On physical examination anything from slight induration in one or both fornices to the finding of a solid or cystic mass in the region of one or both tubes or in the culdesac of Douglas may be found. The tube may be free or adherent. Ascites may be present late in the disease as may be also involvement of the inguinal and supraclavicular nodes. Extreme cachexia is rare but undernourishment and anemia are common.

DIAGNOSIS

The preoperative diagnosis of carcinoma of the tube has been made but once and is exceedingly difficult. Falk, by microscopic examination of material obtained from the culdesac by aspiration, was able to make a positive diagnosis. If a diagnostic curettement is done for a serous or bloody vaginal discharge, and microscopic examination fails to demonstrate the cause, carcinoma of the tube should be suspected.

TREATMENT

It has been generally stated that supracervical hysterectomy with removal of the ovaries and tubes is the operation offering the best chance for recovery. The cervix is spared because of the fact that metastasis to this structure is rare and that it may be useful later for radium implantation. The removal of all palpable pelvic and retroperitoneal lymph nodes is of no avail since metastases to these structures indicate a late and hopeless case.

It would seem that in those patients who are fortunate enough to come to operation early in the disease, a simple bilateral oophorectomy and salpingectomy would suffice for a complete cure.

In those questionable cases post-operative deep roentgen-ray therapy is indicated.

PROGNOSIS

The operative results are found to be extremely poor. Only seven patients, including the one herein reported, have survived the third post-operative year without evidence of recurrence. Probably the chief factors responsible for the poor results from surgery are the lateness of the operation and the inability to recognize the condition at operation.

The case reported here is interesting for the following reasons:

(1) it is one of the two cases reported in patients 25 years of age;

(2) it represents an early case;

(3) it is the case of one of only seven patients surviving a three-year post-operative period without recurrence;

(4) there was present the straw-colored watery discharge which is the nearest approach to a characteristic sign of this condition that we have.

REPORT OF CASE

Mrs. H. A. S., American, white, 25 years of age, housewife, presented herself on May 28, 1930, for examination. She had been married four years. Seven months previously she was delivered of her second child. Six weeks after this she began to have "bearing down" pains in the left lower quadrant of the abdomen, unaccompanied by nausea, vomiting or fever. Following this she began to menstruate every 18 days, more freely than formerly and lasting five or six days. There was no intermenstrual bleeding. About two weeks after the onset of the left-sided pain she began to have pain in the right side which radiated to the back and was more severe than before. This followed each menstrual flow and lasted about one week. About three months following delivery she began to notice a thin yellowish discharge which gradually became deeper in color, thicker, and increased in amount. She became progressively more nervous and irritable and lost strength rapidly. For the past week she had been confined to bed with fever as high as 103 degrees Fahrenheit.

Prior to this illness the menses were regular, 28-day type, lasting three or four days. There had been no urinary or digestive disturbances. There were two children, 19 months and 7 months of age. The family history was irrelevant, as was the past medical history. Eleven

years previously an appendectomy was done for acute appendicitis. She denied having had any venereal disease. General physical examination showed a rather undernourished, underweight individual acutely ill. The temperature was 100 degrees Fahrenheit, the pulse 108 to the minute. The head, neck, heart and lungs were essentially negative for disease. There was tenderness in both right and left tubo-ovarian regions. The extremities, spine and superficial glands were normal. Vaginal examination revealed a laceration of the perineum, a mild prolapse of the uterus with slight enlargement and some fixation. There was marked tenderness in the region of the right tube and ovary. The cervix was moderately enlarged and eroded. There was a considerable amount of yellow muco-purulent discharge from the cervical canal.

A diagnosis of chronic bilateral salpingitis was made. The patient was put to bed for ten days during which time the pain and fever subsided. On June 9, 1930, the patient was operated upon by Dr. John S. Helms, Sr., a low midline abdominal incision being made. The findings at operation were described as follows:

"Chronic bilateral salpingitis with multiple Graafian follicle cysts of the ovaries. There is a large cyst of the right ovary. The fimbriated ends of the tubes are completely closed and plastered down to the contiguous structures. Both tubes and ovaries are prolapsed into Douglas' pouch in one large adhesive mass."

Bilateral salpingo-oophorectomy and a Baldy-Webster suspension of the uterus was done. The patient was discharged in good condition on the thirteenth post-operative day. There has been no evidence of recurrence to date. The report on the tissues by Dr. H. R. Mills, pathologist, is as follows:

"One tube is very much thickened and tortuous, measuring 8 centimeters long by 2.5 centimeters through the distal end. The surface is roughened with fibrinous and fibrous adhesions, and is mottled with brownish red discolorations. The lumen contains a large amount of soft yellowish caseous material. The associated ovary is moderately enlarged, measuring 4x3x2 centimeters, and on gross section is found to contain numerous cysts with gelatinous contents ranging up to one centimeter in diameter. The surrounding ovarian tissue is fibrous and edematous. The other tube is also enlarged, thickened and tortuous, and is fused into an irregular mass

measuring 5x3 centimeters. The surface of this mass is also roughened with numerous fibrinous and fibrous adhesions, and discolored with numerous reddish brown blotches. On gross section numerous cysts containing gelatinous material are exposed. One portion of the lumen is found to contain a large amount of homogeneous necrotic material. The associated ovary is large and boggy, measuring 5 centimeters in diameter, and on gross section is found to contain a large unilocular cyst containing gelatinous contents. The lining of this cyst is smooth and free from excrescences, and the surrounding ovarian tissue is fibrous.

Microscopical sections through the tube with the caseous material show an adenomatous proliferation of the tubular epithelium. In many areas the epithelium has invaded the underlying mucosa and appears as solid collections or masses with a more or less disorderly tubule arrangement. This condition seems to be limited to the mucosa and has not involved the outer walls.

Laboratory opinion: Adenocarcinoma of the tube; chronic bilateral salpingitis and bilateral cystic disease of the ovaries.

SUMMARY AND CONCLUSIONS

1. Primary carcinoma, although the most common neoplasm of the fallopian tube, remains a rarity.

2. The fifth decade of life claims more than 50 per cent of all cases.

3. Chronic pelvic inflammation is probably not a factor in the etiology of tubal carcinoma.

4. Straw-colored watery discharge approaches being a characteristic sign.

5. A preoperative diagnosis is almost impossible.

6. Bilateral oophorectomy and salpingectomy probably suffices for the early cases; oophorectomy, salpingectomy, hysterectomy and radiation for the later ones.

7. The prognosis, based on the surviving cases, is poor.

8. Microscopically, the disease may assume a papillary or papillary-alveolar form; macroscopically, it resembles a chronic inflammatory disease.

9. Peritoneal spread and retroperitoneal metastasis are rather common.

10. One of the two youngest patients with primary carcinoma of the fallopian tubes is reported.

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ARTHRITIS IN INDUSTRY*

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Arthritis is one of the oldest diseases of which we have any knowledge, it having left its impression on the fossil remains of animals of the mesozoic period: animals which were extinct long before the appearance of man on the earth. The disease was here to torment man with its pain and its deformities when he first came into the world and it is to be regretted that it continues here with unabated progress in its battle against the peace of man.

Classification.—Arthritis comprises three general classes, based on the etiology of the disease. These are traumatic arthritis, metabolic arthritis and infectious arthritis. Traumatic arthritis, as the name indicates, is that class of arthritis due to injuries as a primary cause. Metabolic arthritis is that class of arthritis more commonly known as gout. Infectious arthritis includes all forms of the disease which may be due to infection, and, again, this class may be said to include two subclasses, which are specific infectious arthritis and non-specific infectious arthritis. Specific infectious arthritis comprises those cases of arthritis which are due to specific infection, as tubercular arthritis, gonorrheal arthritis and syphilitic arthritis. Non-specific infectious arthritis comprises those cases of arthritis which are due to infection of less specific nature, and, in its advanced stages it is known as arthritis deformans. Again, this class of ar-

*Read before the Fourteenth Annual Meeting, Florida Railway Surgeons' Association Hollywood, May 1, 1933.

thritis comprises two types, which are known as atrophic arthritis deformans and hypertrophic arthritis deformans. These two types differ in etiology, pathology, symptomatology and in essential treatment; yet they have certain points in common which bring them together as a single disease entity.

Etiology.—It is some years since it was discovered and established that some cases of arthritis deformans are due to infection. Some pathologists found that their cases were due to focal infections; others were able to prove that infection existed in the diseased joints in some cases; and others found, furthermore, that there was general systemic infection in some cases. It is most probable that the disease usually starts from focal infections and that the infection later enters the blood to make a systemic infection, in which case, the infection reaches the diseased joints to make a local infection. The peculiarity of the infection is that it is not the direct action of the bacteria upon the tissues which produces the disease; but, like tetanus, the disease is due to the toxins produced by the bacteria. These toxins may act by direct contact with the tissues or they may direct their action through the autonomic nerves. It is only a few years since Barger of Edinburgh and some of his co-workers were able to produce similar toxins in decomposing meats, and they isolated these toxins and worked out their physiological action on the tissues of the body. They found that these toxins are amines and that they vary in physiological action. Some have found that the bacteria, in the process of decomposing proteins, form amines by decarboxylating the amino acids. In our application of these amines to the etiology of arthritis deformans, we have found that isoamylamine (and probably histamine) actually does produce arthritis of the atrophic type, and we have reasons to believe that tyramine and phenylethylamine may serve as causes for the hypertrophic type of the disease.

Perhaps Pemberton of Philadelphia has accomplished more in the study of arthritis deformans than any other one man in this country. Pemberton, in his work in the army and in private practice, found that about 70 per cent of all cases of arthritis deformans are due to infection; but he did not determine the relation of the infection to the morbid condition. A most important point brought out by Pemberton in his investigations is the fact that the causative agent, what-

ever it is, produces its morbid action by reducing the circulation of the blood about the joint, and we are convinced that this is the key to the etiology of both types of the disease.

Combining the work of Barger and Pemberton and interconnecting them with some personal work, I have been able to discover that the infectious cases of arthritis deformans of the atrophic type are most probably due to the astringent action of isoamylamine and histamine on the capsular ligaments of the affected joints, making greater obstruction to the veins than to the arteries, thereby causing a passive congestion of the subcapsular tissues by the mechanical action of this obstruction to the circulation. This obstruction to the circulation reduces the nutrition to the tissues about the joint just as was suggested by Pemberton, and the cartilages, being the tissues to suffer most from this deficient nutrition on account of their deficient circulation, are the first tissues to yield to the insufficiency of nutrition. The mechanical action in the hypertrophic type is probably not through the astringency on the ligaments; but the action seems to be directed to the walls of the blood vessels and, in this type, the morbid condition is not limited to the joint tissues as it is in the atrophic type. I have been able to demonstrate this action in the atrophic type; but present the statements as to the hypertrophic type more as theory, although I have ample reasons to believe it a correct theory. I would be glad to go more thoroughly into the action in each of these conditions; but time will not permit further discussion here.

As indicated above, only about 70 per cent of the cases of arthritis deformans can be traced to infection, so there must be other causes. It has been found that cold combined with moisture is a direct cause of many cases of arthritis deformans. The atrophic type has been traced to allergens in some cases and we believe that this will be found a much more important cause when we learn more definitely the relation of the allergens to their results. Mental states may serve as causes of either type of arthritis deformans; but these differ in their action. Such mental states as fear, anger and grief seem to act through the cranio-sacral nerves and may be causes of the atrophic type of arthritis; while constant worry from financial losses, social decline or moral reflection may serve as a cause for hypertrophic arthritis. It is possible that the

hypertrophic type may be due to creatin, creatinin or guanidine; but we have not yet any positive evidence of such causes. Other causes might be mentioned; but these are the most important and some of these may act only as adjunct causes. It is probable that many cases of arthritis may be due to two or more causes combined. It is well to keep ever in mind that idiosyncrasy has much to do in the cause of arthritis of either type. The atrophic type is seen more frequently in the spastic type of people; while the hypertrophic type is seen more frequently in the tonic type of people. While this is not an invariable rule, it is well worth remembering.

Arthritis in Industry.—Perhaps arthritis is second only to the common cold as a menace to industry. In the first place, industry may be an important factor in producing the disease, or, more often, in aggravating the disease after it has been started by other causes; and, in the second place, the disease may hamper industry by attacking trained laborers and forcing their temporary retirement while less capable men must be substituted to the detriment of organized business.

Many cases of traumatic arthritis have their origin from accidents in industry, and it seems to be a tendency of both types of arthritis deformans to attack joints which have received injuries in former times, especially, such injuries as have not been fully restored to normalcy. For this reason, it behooves the surgeon in attendance upon injured persons to see that all joint injuries are fully restored as nearly as possible to normal before patients are discharged. Again, the arthritis may have existed long before the alleged injury: a matter worth determining at the first call to an alleged injury before such person has time to adjust a statement to the contrary. This should be done in justice to all concerned. A case of this kind may be the basis for a litigation which may depend entirely on the evidence of the attending physician, which places the greater responsibility upon the attending physician to do justice to all concerned.

Cold from exposure was given as one of the major causes of the atrophic type of arthritis deformans. Here, again, there may be a question as to the responsibility of the employer in the development of this disease. It behooves every corporation, employing large numbers of laborers, to have an expert examining physician and surgeon to give each employe a thorough physi-

cal examination before placing laborers in their work. We observed that only the spastic type of people are highly susceptible to the atrophic type of arthritis, the type seen most among laborers. The spastic type comprises those who are more susceptible to colds and the allergens, two of the most important causes of this type of arthritis. By taking the blood pressure and completing a general physical examination and getting the family history, it is not hard to determine who are spastic, and none of this class should be placed where there is much exposure to unfavorable weather conditions, neither should they be placed where they have to breathe disagreeable fumes of smoke and other gases which excite allergic sensitivity. It is well to reject the ones who have extremely low blood pressure, since they are especially susceptible to atrophic arthritis and other allergic diseases, and their employment entails too great risk for disorganization of business by attacks of these diseases.

Since the hypertrophic type of arthritis usually appears after middle life and progresses slowly, it concerns industry less than the atrophic type; but those laborers who are retained into the first years of senility should be watched for hypertension and the hypertrophic type of arthritis, lest this disease creep on to interfere with the operation of a mill or a machine. However, this type is due less often to cold from exposure and there is no need of uneasiness from this source. It is more liable to come in conjunction with arteriosclerosis, a condition of serious importance to laborers who are doing strenuous work.

When persons employed in industry begin to develop either type of arthritis deformans, they should be required to undergo treatment early before the disease develops some of its terminal symptoms and permanent deformity results, with the corporation held responsible for the exposure or other causes resulting in the crippled condition.

Treatment.—It was indicated under etiology that the atrophic type of arthritis and the hypertrophic type are due to opposite causes and, for that reason, they should receive opposite kinds of treatment.

The atrophic type of arthritis deformans, as was indicated under etiology, is due to the as-tringency of certain agents acting upon the capsular ligaments to make pressure on the blood vessels penetrating these ligaments, causing a passive congestion of the subcapsular tissues. With this thought in mind, it is clear that this

astrigent action must be overcome by some drug or other agent to relax this ligament and permit the blood to flow along in its proper course. If this is done early and the cause is removed to prevent further action from the source, the disease is easily relieved; but, if treatment is delayed until the red cell infiltration is replaced by fibrous tissue proliferation, and the pannus has adhered to the ends of the bones, the condition is much graver, and this increases during each day of delay. Let it ever be remembered that every case of atrophic arthritis is a very serious condition if treatment is not immediate and persistent. The first thought is to relax the tissues of the capsular ligament to permit the blood to move along normally; but this must not end the treatment, for the cause must be removed to prevent persistence and recurrence of the disease. Sometimes we get wonderful results from our salicylates or other relaxing agents at first; but, after a few days, the disease recurs with greater severity. This is usually due to the fact that the cause is not removed, and the disease grows worse as the body becomes immune to the relaxing agent. Then a change of treatment may relieve again. Thus we go from one remedy to another with its remissions at first from each remedy, followed by exacerbations as the body becomes immune to the remedy, while the joint becomes more nearly fixed each day. The cause must be found and removed to give certain and permanent relief. Again, it must be borne in mind that the cause began as a focal infection; but it may have progressed to a general systemic infection, in which case, not only the focal infection should be removed, but the systemic infection should be overcome by the use of a vaccine. Heat in one of its forms is a wonderful relaxing agent and may be applied to the affected joint with good results; but it must be remembered that heat increases the activity of bacteria and, in cases of local infection, the inflammatory process may be better controlled by retarding the action of the bacteria with ice applications.

In the treatment of the atrophic type of arthritis, it is well to remember that this type is more common in the spastic type of people and that the acute attack should be followed up with tonics of codliver oil, yeast and ample foods rich in proteins, as milk, eggs and red meats.

As was observed under etiology, the hypertrophic type of arthritis is due to the direct action of certain agents upon the walls of the blood

vessels supplying a joint and the treatment should be such as would relax these vessels. We have found that the nitrites, the thiocyanates and the bromides have direct action on these vessels and should be of some benefit in relaxing them to permit the blood to flow more freely through these tissues. However, I have never found any remedies which are entirely satisfactory in the treatment of this type of arthritis.

In both types of arthritis deformans, the carbohydrates should be limited in the diet, since the obstruction to the circulation prevents the oxygen from coming into contact with the sugars to burn them in the body.

Arthritis is a very much neglected subject and is a very interesting subject and should receive more attention in study and investigation than it has received in the past. In industry much time may be conserved by the examinations as indicated above and the adjustment of laborers so that those who are more susceptible to the disease may be placed where they may receive the least exposure. Again, much should be accomplished by early treatment while the disease is amenable to treatment.

A POSSIBLE CAUSATIVE MECHANISM OF BACTERIAL ENDOCARDITIS*

JAMES S. GRABLE, M.D.,

Tampa.

Pathogenic organisms on invading the blood stream are distributed to the smallest vessels of every vascularized tissue and in these sites may start a localized inflammation. On the other hand, the bacteria may remain in the blood stream and at certain vulnerable points may, under optimum conditions, cause an infective thrombus. One of the commonest sites for such a location of pathogenic bacteria is the folds of endocardium forming the heart valves. That the attack is upon the endothelium rather than in the dense fibro-elastic tissue beneath seems to be upheld microscopically at least, since there is no connection between the vegetations on the line of closure of the valve and the underlying capillaries. The result of this bacterial insult may be either an acute or a subacute process. In the secondary, or acute disease the causative agents are of high virulence, while in the primary, or subacute process the agent is almost, if not always, of low virulence.

*Read before the Hillsboro County Medical Society, July 11, 1933.

At present the generally accepted theory for the predilection of the left heart valves in endocarditis is one based on the greater force of closure of these valves. This explanation is hardly consistent with facts, since the aortic valve is the seat of vegetations in the minority of cases, except in the acute form in which chance and virulence must be considered. It is to be remembered that the acute form is very rare and contributes but a small number of endocarditides, the ratio being about 1 to 7 or 8. The greater preponderance of mitral over aortic involvement is seen in rheumatic heart disease, and it is also involved in the large majority of cases of subacute bacterial endocarditis.

In bacterial endocarditis the valves that are attacked are usually already abnormal from chronic endocarditis (rheumatism 85%) or some congenital defect in the young and injured from atheromatous or rarely syphilitic changes in the older.

As above mentioned, the valves involved in endocarditis are nearly confined to the left side of the heart, the side receiving the lung blood. Patients with congestive heart failure, emphysema, and chronic bronchitis, and those with certain congenital heart defects are relatively immune from endocarditis.

In simply explaining these few points a possible causative mechanism would seem to evolve resting on a peculiarity of the bacteria in one instance and a normal physiological factor of the blood in the other.

The causative agent of subacute bacterial endocarditis is the nonhemolytic streptococcus. In the acute form the offending agent may be the pneumococcus, the staphylococcus aureus, the gonococcus, the bacillus "influenzae," or the hemolytic streptococcus. Even though some of the organisms may become, to a degree, facultative anaerobes, their development is most characteristic and their growth is most luxuriant under aerobic conditions. The more virulent groups or strains may easily become highly pathogenic under anaerobic conditions, but those of low pathogenicity require an aerobic medium.

There exists a difference of twenty-five to thirty-five or more per cent in oxygen saturation between venous heart and arterial blood.

So with this physiological factor of the blood and the peculiarity of the bacteria a plausible mechanism seems to present itself.

Following are some important facts which substantiate this mechanism.

1. As was mentioned earlier, the greater preponderance of mitral over aortic involvement is seen in rheumatic heart disease. Proof is still lacking to settle the contention that the vegetations in rheumatic valvulitis are secondary to an interstitial valvulitis, and although the relationship has not been established, strains of streptococci, particularly of the nonhemolytic group, have been isolated from cases of rheumatic fever.

2. Subacute bacterial endocarditis is almost limited to the left side of the heart, which contains the blood highest in oxygen saturation. The pathogen is aerobic and low in virulence. It is relatively easy for this weak organism on the site of injured cusps and in the presence of an abundance of oxygen to establish itself.

3. Acute bacterial endocarditis is most common in the left side of the heart, very infrequently occurring in the right heart valves. This side of the heart contains blood lowest in oxygen saturation, and the organism responsible is highly virulent, frequently being able to establish under perverse circumstances.

4. As stated before, patients with chronic bronchitis, emphysema and congestive heart failure, in which the left heart blood has not as high saturation with oxygen as normal, are relatively immune. Here it would seem plain why an aerobic agent of low pathogenicity might be unable to become active; an analogous explanation of why the right side of the heart is not a common location for acute endocarditis, and why it is not a site for the subacute type except in rare instances.

5. Subacute bacterial endocarditis is almost never a complication of septal defects, in which conditions there is an admixture of aerated and non-aerated blood causing the left heart blood to be of lower oxygen saturation than normal.

It appears then, that the price the left heart pays for its nearly maximally saturated blood is infective endocarditis. Its side partner, whose blood is materially lower in saturation with oxygen, is almost entirely free from the activities of the aerobic organisms, a freedom which the left heart enjoys only when it receives venous blood or lung blood of poor oxygen content.

Thus, without this peculiarity of the offending bacteria, and the normal physiology of the left heart blood, bacterial endocarditis might be an almost unheard of event and occurring no more frequently in the left heart than in the right.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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OCULAR DISTURBANCES IN PREGNANCY AND DURING THE PUERPERIUM

During pregnancy, numerous changes are manifest in the eyes and their adnexa that are normal to the state and disappear with its termination. Not infrequently, however, disturbances of vision arise in the course of gestation and during the puerperium which are danger signals of the greatest importance. These visual disturbances may be the first indication of the gravest danger to the life of the woman, or the first symptoms of disease of the various ocular structures which may terminate in diminished vision or even blindness.

All the elements necessary for the growth of the fetus and for the promotion of its metabolic activity are derived from the maternal body, which must also take care of the waste products arising from the increasing cell activity. While the pregnant state is a physiologic condition, there is, nevertheless, an enormous demand made on the reserve material of the maternal body. In addition, there is the mechanical interference with bodily functions due to pressure disturbances.

The increased demand on the reserve material of the pregnant woman is bound, under all circumstances, to diminish the resistance of the body to all injurious influences, autogenous or ectogenous. Thus, in any organ of the body in which there exists some abnormality, or in which there is present, at the time of conception, some morbid process, the chances for pathologic changes to take place or to increase are greatly enhanced by the generally lowered bodily resistance.¹ Further, the general lowered resistance cannot successfully combat the effects of foci of infection that may be active in the body, which may act as the exciting factors in lighting up morbid processes in any organ, the eye not excepted.

The early recognition of ocular disturbances during gestation is of great importance, as they frequently are warnings of marked systemic changes that menace not only the eyesight of the woman, but possibly her life.

The ocular disturbances liable to complicate pregnancy are classified by Woods as: (1) the sudden amaurosis usually called uremic; (2) the retinal changes spoken of as albuminuric retinitis of pregnancy; (3) loss of vision in some parts of the visual field without retinal lesion, some-

times with pallor of the disk, and (4) neuroretinitis not resembling that called albuminuric.

"It is now accepted that the eclampsia of pregnancy is not uremic in origin but is allied to pernicious vomiting which is caused by the circulation of toxic substances in the blood." So the amaurosis of eclampsia is believed to be due to a sudden toxic saturation of the optic nerve and retina, retinal changes being absent because of insufficient time for them to develop. This view is supported by the fact that optic atrophy sometimes follows uremic amaurosis.

The term "albuminuric retinitis of pregnancy" has been superseded by retinitis of pregnancy. "So far as they occur together, retinitis of pregnancy and albuminuria may be disassociated, for it is a patent fact that either may and frequently does exist without the other. Therefore, an albumin-free urine need not rule out a diagnosis of toxic retinitis in a pregnant woman."

The retinal disturbance is not considered to be a form of albuminuric retinitis, although the true albuminuric retinitis may develop during pregnancy from a preexisting chronic nephritis; nor is the nephritis of pregnancy a true inflammation. Both the retinitis and the nephritis are undoubtedly dependent on the same cause, a toxemia. What the nature of this poison is has not been fully settled, but progress has been made. At least a name has been attached to the toxins, viz., syncytiotoxins, by which is meant the products of the disintegration of the syncytial cells.

One might say the formation of toxins in one's body is a physiologic process. It is not the formation, but the failure of proper elimination of toxins, which acts deleteriously on the economy.

In the retinitis of pregnancy, the prognosis, so far as it concerns the vision and life of the patient, depends on the duration of the gestation. If the visual disturbances appear during the first six months, usually the pregnancy should be terminated if the sight is to be saved. It must be borne in mind that any serious eye lesions may be made worse by a subsequent pregnancy.

Chronic nephritis and retinitis caused by it form sufficient indications for the termination of the pregnancy, as the patient may recover entirely from the nephritis, or at least be greatly improved. The induction of labor, therefore, has been recommended as a therapeutic measure, because with the termination of pregnancy the

inflammatory deposits in the retina may be absorbed and good vision be restored, provided the process has not continued so long that secondary changes have taken place.

In general, it may be said that retinal hemorrhages usually indicate a grave toxemia.

If, when the hemorrhages are over the macula, and the optic nerve is involved, the symptoms are not heeded, during which time the toxemia becomes increased, a permanent impairment of vision is inevitable. The life, future health and vision of the woman are, therefore, best safeguarded by an interruption of the pregnancy. Usually, the vision improves rapidly after delivery, and the exudation and hemorrhages become absorbed to a large extent, although in extensive effusions a certain amount of permanent impairment is usual.

The prognosis as regards sight in these cases is probably not so good as is commonly thought, though as regards life it is much better than in the nephritis of the non-pregnant. Sight, however, never improves until the pregnancy is terminated. Without the induction of labor, the prognosis is most serious. Cases which go on to term show the largest proportion (15 per cent) of deaths, and the greatest damage to sight. Spontaneous premature delivery shows 11 per cent of deaths, while after the artificial delivery, the mortality is but 4 per cent.

Since foci of infection in the paranasal sinuses, teeth and tonsils have been proved to be such active factors in the etiology of ocular disorders in apparently healthy persons, it is only reasonable to suppose that they would be increasingly dangerous as etiologic factors in the condition of lowered bodily resistance such as that induced by pregnancy.

Would it not be wise, therefore, during gestation, in addition to the early frequent examination of the urine which is practically always done, also to search for possible foci of infection, especially in the teeth, paranasal sinuses and tonsils, and correct morbid processes when found, rather than to run the risk of allowing the patient to proceed to term with the possibility of having to terminate the pregnancy in order to save life or preserve vision?

It is also suggested that visual examination should be made, as a routine procedure, during the latter months of pregnancy, with especial regard to the fundus and visual fields.

THE SECOND REPORT OF THE MEDICAL ECONOMICS COMMITTEE

The second meeting of the Medical Economics Committee of the Florida Medical Association was held in Orlando, Sunday, October 8th, at an all-day session in the San Juan Hotel. To this meeting were invited the presidents, secretaries and Medical Economics Committees of the several County Medical Societies. Fifty-two doctors were in attendance from the following seventeen County Medical Societies: Brevard, Dade, Duval, Hillsboro, Lake, Marion, Orange, Palm Beach, Pinellas, Polk, St. Johns, St. Lucie-Okeechobee-Indian River-Martin, Sarasota, Seminole, Sumter, Taylor and Volusia. Included were President W. M. Rowlett and members of the Executive Committee of the State Association.

Mr. Marcus C. Fagg, Florida Director of the Federal Emergency Relief Administration was present, by invitation, and assisted materially in clarifying certain phases of the Florida Physician-Federal Relief relationship. A considerable portion of the morning session was devoted to a discussion of this subject with particular reference to determining a satisfactory and fair fee basis for professional services to recipients of unemployment relief, it having been definitely stated by the Director that uniform fees must prevail for the entire State.

While it was realized that the assembled body was not constituted with authority to act for the Florida Medical Association or its members officially, it was felt that the attendance represented a fair "cross section" of the Florida physician body and since early action was deemed essential, the convention believed it was justified in authorizing the Medical Economics Committee of the Florida Medical Association to confer with the Director of Emergency Relief and to submit to him a temporary fee proposal on behalf of the physicians of Florida to be sent to the Washington headquarters for consideration. It is to be definitely understood that the fees proposed are for a temporary period—"for the duration of the emergency"—and in no sense indicate fees which would be acceptable except in a spirit of patriotism in assisting the country in time of need.

The fee schedule that has been submitted to Director Fagg to be forwarded to Washington varies in no appreciable amount from suggestions made by those in attendance and also coincides very closely with those submitted by the physi-

cians of several counties who took action prior to this meeting. The schedule: office visits, \$1.00; house visits in town (day), \$2.00; house visits in town (night), \$3.00; house visits in country (day), \$3.00 plus 25 cents per mile each way; house visits in country (night), \$4.00 plus 25 cents per mile each way; obstetrics, including pre-natal and post-natal care, \$25.00. The Committee hopes that its action will receive the indorsement of the constituent Societies of the State Association. It recommends that fees from services paid for by the Federal Government be retained by the individual member performing the service.

After due deliberation, with the helpful advice of those attending the conference, the Committee desires to submit the following recommendations:

I. *Other Indigents*.—That each County Society seriously consider contracting with its various municipal and the county governments to furnish medical services to the indigents of these political units; that the County Society supervise the service rendered and that the funds received from such contracts be paid into the Society's treasury to be used for the scientific, economic and social interests of its members.

II. *School Children*.—That there be no free examinations or vaccinations of children by County Society members. Those who are indigent should be provided for as suggested in the preceding paragraph. Those who can pay should secure the services from the family physician.

III. *City and County Physicians*.—We believe that it is impossible for any man, no matter how honest and conscientious he may be, who is serving as part-time employee of the county or city and part time in private practice to be able to render adequate service when his private income is being neglected.

We therefore recommend that county and city physicians be paid an adequate salary and that they not be allowed to do outside practice for which they expect to receive remuneration, and that these physicians be required to render their services only to such patients as have been investigated and found to be without the non-necessities. In this way those physicians who are now overburdened with charity work will receive adequate salaries, allowing them to devote their full time to it, and will relieve the private practitioner of such work as we now find it impossible for the county or city physicians to take care of.

IV. *Newspapers*.—That County Societies take under serious advisement at an early date the

newspaper program suggested in the Committee's Preliminary Report (par. 2, page 127, Fla. Med. Jour., Sept., 1933).

V. *Insurance*.—That the County Societies consider the adoption of some such plan as that of the Philadelphia Medical Society, which follows, for guidance of its members in relation with insurance companies.

"a. For all original examinations by a company examiner, a fee should be paid by the interested company.

"b. For all additional information which may be required by the insuring company from physicians who have attended the applicant in the past, a fee should be paid by the insuring company. (See resolutions of Duval County Society, p. 398, Fla. Med. Jour., March, 1933.)

"c. For the removal of extra ratings or other additional premiums imposed upon applicants for insurance because of existing impairments, medical history, etc., which evidence of health is required by the insuring companies, a fee should be paid by insured.

"d. For reinstatement of a lapsed policy, when medical evidence of insurability is required by the company, a fee should be paid to the physician by the insured desiring reinstatement of the policy.

"e. In case of claims for disability benefits from life insurance and health and accident insurance companies, a fee should be paid to the physician completing the proof of disability forms by the claimant, since it is incumbent upon him to supply proof of disability according to the terms of the various clauses in force.

"f. Forms to be completed by the physician or physicians who have been in attendance on the case should be restricted to that pertaining to the particular illness or cause of disability. Particularly in health and accident insurance, information should not be given to an 'inspector' without authorization from the claimant, and a fee should be required by the physician."

That the so-called medical inspections, for which fees of 25 to 50 cents are paid by several companies, be looked upon with disfavor.

Respectfully submitted,

COMMITTEE ON MEDICAL ECONOMICS,
HERMAN WATSON, M.D., Chairman;
O. O. FEASTER, M.D., Secretary;
C. A. ANDREWS, M.D.,
J. L. KIRBY-SMITH, M.D.,
R. O. LYELL, M.D.

PROGRAM

OF
FLORIDA EAST COAST MEDICAL ASSOCIATION

Miami-Biltmore Hotel,
Coral Gables,
October 27 and 28, 1933.

FRIDAY, OCTOBER 27
SURGICAL CLINICS
Jackson Memorial Hospital
Northwest 10th Ave., at 17th St.
10:00 A. M.

Osteomyelitis.—Demonstration of operative procedures and of cases at various stages of the disease. Arthur H. Weiland, Coral Gables.
Plastic Surgery.—Demonstration of cases and operative procedures. Thomas O. Otto, Miami.
Urological Surgery.—Operative procedures. Roy J. Holmes and E. Clay Shaw, Miami.
Vaginal Interposition.—Demonstration of operative technique. Walter C. Jones, Miami.
Abdominal Hysterectomy.—Operative technique. Robert O. Lyell, Miami.
Perineal Repair.—C. F. Sayles, Miami.
Myomectomy.—J. C. Turner, Miami.
Colostomy.—Joseph S. Stewart, Miami.
Other clinics will be held on whatever material there is of interest in the hospital at the time.

FRIDAY, OCTOBER 27
MEDICAL CLINICS
Jackson Memorial Hospital
11:00 A. M. Causes of Obscure Fevers in Early Life. Case Presentations. Warren Quillian, Coral Gables.
11:30 A. M. Cases Showing Acute Febrile Disturbances in Children. Wm. McKibben, Miami.
12:00 Luncheon. Jackson Memorial Hospital. (No Charge.)
1:00 P. M. Examples of Most Common Skin Disorders. Buist Litterer, Miami.
1:30 P. M. Chromophobe Adenoma of the Pituitary Gland. Case Presentation. Max Dobrin, Miami.
2:00 P. M. Patients with Cancer of Various Organs. Results of Radiotherapy. Joseph Lucinian, Miami.
2:30 P. M. Cases Presenting Various Aspects of Coronary Disease. E. S. Nichol, Miami.
3:00 P. M. Two Cases of Probable Gonorrheal Endocarditis. Necropsy Report. Donald Gowe, Miami.
3:30 P. M. Abdominal Tumors Outside the Gastro-Intestinal Tract. Gerard Raap, Miami.
4:00 P. M. Examples of Endocrinopathies. Robert Harris, Miami.
4:30 P. M. Artificial Pneumothorax Clinic. Technique of the Administration of Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis. M. J. Flipse, Miami.

FRIDAY, OCTOBER 27
8:00 p. m.
Miami-Biltmore Hotel Dining Room
Annual Banquet and Dance for Dade County Medical Society and Florida East Coast Medical Association.
Addresses: Gerard Raap, president, Dade County Medical Society
Edward Jelks, president, Florida East Coast Medical Association.

SATURDAY, OCTOBER 28
9:00 a. m.
Miami-Biltmore Hotel
SCIENTIFIC PROGRAM
AN OPEN DISCUSSION OF INDIGESTION OR DYSPEPSIA
(A subject of importance to every physician, general or special.)

General Theme:

- The Interrelation of Gastro-intestinal Pathology with that of Distant Organs and Systems. Ernest B. Milam, Jacksonville.
Collaborated Review. Demonstrating the Significance of this Commonly Occurring Complaint. Ernest B. Milam, Jacksonville, directing the program.
1. The Function of the Laboratory in the Diagnosis of Gastro-intestinal Conditions. C. E. Royce, Jacksonville. 10 minutes.
2. What the X-ray Can Do to Help in the Evaluation of Gastro-intestinal Symptoms. E. M. Hendricks, Ft. Lauderdale. 10 minutes.
3. Indigestion in the Older Child. G. S. Osincup, Orlando. 12 minutes.
4. Indigestion Associated with Gynecological and Obstetrical Conditions. Leigh F. Robinson, Ft. Lauderdale. 12 minutes.
5. The Attitude of the Surgeon Toward Indigestion. J. Knox Simpson, Jacksonville. 15 minutes.
6. The Relations of Indigestion to Lesions in the Chest, Heart and Blood Vessels. S. A. Folsom, Orlando. 15 minutes.
7. Psycho-neurological Conditions and Indigestion. Ralph N. Greene, Jacksonville. 15 minutes.
8. General Discussion.

Your Committee adopted the above plan of program, believing that an active general interest will be elicited and sustained if a symptom of such common and universal occurrence as Indigestion is considered; first, by short articles contributed by representatives of various special fields of medicine and, second, by general discussion and comment from everyone, regardless of the nature of his practice.

DISCUSSION IS URGED. IT IS YOUR PROGRAM.

SATURDAY, OCTOBER 28
12:00 noon
Luncheon at Hotel

1:30 p. m.
Miami-Biltmore Hotel
SCIENTIFIC PROGRAM
Endocrinology and Menstrual Disturbances. L. M. Rozier, W. Palm Beach. 15 minutes.
Discussion.
Pellagra and the Depression. L. L. Whiddon, Ft. Pierce. 15 minutes.
Discussion.
Chorio-epithelioma. Case Report. I. M. Hay, Melbourne. 10 minutes.
Discussion.
Immediately following the Scientific Program, a business session will be held.

BUSINESS SESSION

- Dr. Edward Jelks, President, in the Chair.
1. Minutes of last meeting.
2. Unfinished business.
3. New business.
4. Selection of meeting place for 1934.
5. Election of Officers:
(a) President.
(b) First vice-president.
(c) Second vice-president.
(d) Secretary and treasurer.
6. Drawing for the prize.
7. Adjournment.

The Committee on Arrangements has tried to leave sufficient time between the clinics and other parts of the program for all guests to enjoy the facilities for recreation and pleasure offered by the Miami-Biltmore Hotel. There will be golf, tennis, swimming, dancing, etc. You are urged to bring your wife. It is the endeavor of the Committee to make this the best convention the Florida East Coast Medical Association has ever held. Come prepared to have a good time and you will not be disappointed.

MEETING OF PUBLIC RELATIONS COMMITTEE

A meeting of the Public Relations Committee was held in Ocala, at the Hotel Marion, on August 27, 1933. The meeting was called to order by Chairman H. C. Dozier.

The entire program of the broadcasts from Station WRUF in Gainesville was discussed, and it was gratifying to find that practically the entire program from October 1, 1933, to May 27, 1934, consisting of 18 broadcasts, was complete. Following is the list as completed:

1. The Scientific Basis of Modern Medicine—Thomas E. Buckman, Jacksonville—Oct. 1, 1933.
2. Genetics: What We Inherit—W. H. Spiers, Orlando—Oct. 15, 1933.
3. Growth, Maturity and Senescence—D. D. Martin, Tampa—Oct. 29, 1933.
4. Nutrition: Quantitative Aspects—E. W. Bitzer, Tampa—Nov. 12, 1933.
5. Nutrition: Qualitative Aspects—W. C. Blake, Tampa—Nov. 26, 1933.
6. The Mechanics of the Circulation—J. Ralston Wells, Daytona Beach—Dec. 10, 1933.
7. The Mechanics of Respiration—T. H. Bates, Lake City—Dec. 24, 1933.
8. The Mechanics of Digestion—G. S. Osincup, Orlando—Jan. 7, 1934.
9. The Mechanics of Posture and Locomotion—J. Knox Simpson, Jacksonville—Jan. 21, 1934.
10. The Mechanism of Vision: Optics—Shaler Richardson, Jacksonville—Feb. 4, 1934.
11. The Mechanism of Hearing: Accoustics—W. J. Knauer, Jacksonville—Feb. 18, 1934.
12. The Organization of the Body—T. Z. Cason, Jacksonville—March 4, 1934.
13. The Physiological Basis of Behavior—Thomas E. Buckman, Jacksonville—March 18, 1934.
14. The Physics of Modern Medicine—J. N. Moore, Ocala—April 1, 1934.
15. The Provision Against Trauma—H. C. Dozier, Ocala—April 15, 1934.
16. How Wounds Heal—Thomas H. Wallis, Ocala—April 29, 1934.
17. The Defense Against Infection: Cellular Defense—R. O. Lyell, Miami—May 13, 1934.
18. The Defense against Infection: Humoral Defense—J. S. Stewart, Miami—May 27, 1934.

The Chairman of the Department of Health of the Federated Women's Clubs, Mrs. J. Ralston Wells, asked the Committee for their approval, advice, and cooperation, in inaugurating

a health program in the State of Florida. This was approved, providing these programs come under the same regulations as any component county medical society. Before a reply was given, however, an expression from the full Committee was thought advisable. Therefore, the absentees were so notified, and any action will be withheld until replies can be secured.

The matter of County Medical Health Programs was discussed. It was thought that the available literature and motion picture film list as compiled in this Committee's files were not being used as much as they could be. Accordingly, a letter is to be sent to every County Medical Society urging their action in this matter for fall work.

Meeting adjourned, subject to the call of the Chairman.

(Signed) J. RALSTON WELLS, M.D.,
Secretary, Public Relations Committee.

MEETING OF SOUTHERN MEDICAL ASSOCIATION

With every prospect of a banner meeting, the Southern Medical Association moves on to Richmond for its next annual convention, beginning on the 14th and extending through the 17th of November.

Probably at no time in the history of the nation has solidarity of effort and thorough accord of spirit been more necessary than at this moment when the clouds of the devastating depression seem to be breaking. The physicians of the South, always alert to opportunities and obligations, can "do our part" just now in no more effective way than by bringing to one another the stimulus that flows from the companionship, from the broadening of ideas, from the actual dissemination of new thought that always mark the sessions of this great organization.

It seems fitting that this girding of the medical forces of the South for the New Day that is dawning should occur in the capital of the Old Dominion, the focal point of so many stirring events in the history of the United States. Today a metropolitan area of wide dimensions and a medical center of real note, Richmond, of a yesterday that reaches back to the dawn of English occupancy of this continent, is filled with memorials of great names and greater deeds that, along with its natural beauties, lend it a lure, a charm equaled by few other American cities. To these physical and historic embellishments it adds

a warmth of hospitality that assures a genuine and winning welcome to our Association.

In behalf of the profession in this city as expressed by your host, the Richmond Academy of Medicine, we extend to the physicians of the South cordial greetings and expression of our earnest desire to have you with us during these notable sessions. General and sectional programs have been admirably arranged and the clinics and scientific exhibits will offer demonstrations of lively interest. Local committees will spare no effort to contribute to the comfort, convenience and entertainment of the delegates and such guests as may accompany them. Let us hope, then, to see you among this great host.

JOSEPH F. GEISINGER, M.D.,

Chairman, Publicity Committee.

Address: Stuart Circle Hospital, Richmond, Va.

STATE NEWS ITEMS

The following Florida doctors have recently affiliated themselves with the Florida Medical Association through their respective county medical societies:

Julian H. Buff, Orlando.

C. W. McDonald, Defuniak Springs.

E. Preston, Miami Beach.

C. J. Strong, Miami.

* * *

Dr. and Mrs. David Schneider of Jacksonville announce the birth of a son, Leonard Stanley, on July 10th.

* * *

Dr. J. T. Bradshaw of San Antonio spent the month of August in Chicago doing post-graduate work at the Rush Medical College.

* * *

Dr. and Mrs. C. D. Whitaker of Raiford attended the World's Fair in Chicago during the month of August.

* * *

Dr. Shaler Richardson of Jacksonville, secretary of the State Association, spent two weeks of October in the north. He attended the American Academy of Ophthalmology in Boston, October 18th to 22nd; also a meeting of state association secretaries held at the headquarters of the American Medical Association in Chicago. Dr. Richardson visited clinics in Boston, Chicago and New York during this trip.

* * *

Dr. F. S. Skiff and family of Ft. Lauderdale have returned from a visit in Canada.

Dr. W. L. Fitzgerald of Miami has returned from a visit with relatives and friends at Birmingham.

* * *

Dr. S. F. Smith and family of Lakeland have returned from a three weeks' vacation in the mountains of North Carolina. The doctor says golfing in the mountains is fine.

* * *

Florida doctors who attended the Southern Pediatric Seminar at Saluda, N. C., from July 26th to August 6th were:

Robert C. Black, Plant City.

J. T. Denton, Sanford.

W. E. Mitchell, Coleman.

S. C. Wood, Leesburg.

* * *

Dr. John S. Helms, Jr., of Tampa was made president of the Seminole Indian Association at a reorganization meeting held at Tampa, September 8th. Dr. Herbert R. Mills of Tampa was made a director of the organization.

* * *

Dr. W. J. Barge announces the removal of his offices from the Calumet Building to 442-444 Ingraham Building, Miami.

* * *

Dr. and Mrs. A. D. Amerise of Coral Gables announce the birth of a daughter at the Jackson Memorial Hospital, September 17th.

* * *

Dr. J. C. Pate of Tampa recently returned from New York and Boston where he spent six weeks visiting surgical clinics.

* * *

Dr. C. E. Tumlin of Miami has returned from a vacation spent in North Carolina and Georgia. He reports that he particularly enjoyed the golf links at Blowing Rock and Waynesville.

* * *

Dr. Maximilian Stern of DeLand announces his association with Dr. J. N. Fogarty at 220 Magnolia Avenue, Daytona Beach. His practice will be limited to urology.

* * *

Dr. George L. Cook returned to Tampa early in October from an extensive trip through the east and middle west. Dr. Cook visited clinics in Chicago and also the Mayo Clinic at Rochester, Minn.

* * *

Dr. and Mrs. R. L. Hughes of Bartow have returned from Chicago where they visited the Fair.

Dr. H. B. McEuen of Jacksonville has returned from Chicago where he attended the First American Congress of Radiology during the last week in September.

* * *

Dr. W. M. Rowlett, Tampa, president of the Florida Medical Association, spent three weeks in the north during the month of July, visiting clinics in Chicago, New York and Boston. While in Chicago, Dr. Rowlett visited the officers of the American Medical Association and also attended the Fair.

* * *

Dr. and Mrs. E. J. Melville of St. Petersburg have returned home after a five months' tour of Europe. Their trip included Germany, Czechoslovakia, Austria, Hungary, Italy, Switzerland and France. Dr. Melville took special clinics and lectures at Vienna for two months.

* * *

Dr. and Mrs. W. S. Nichols of Lake City have returned from a trip to Chicago where they visited the Fair.

* * *

Dr. and Mrs. W. C. Page of Cocoa returned September 27th from a vacation spent in Chicago and Canada.

* * *

Dr. Rosa L. Sullivan of Pensacola spent two weeks of September in Chicago where she attended clinics.

* * *

Dr. F. S. Jennings has returned to St. Petersburg from Dryden, N. Y., where he spent the summer.

* * *

Dr. B. F. Butler and family of Hollywood recently returned from a vacation spent in the mountains of North Carolina.

* * *

Drs. G. H. Edwards, L. C. Ingram and Louis Orr of Orlando left recently for Chicago to attend the meeting of the American College of Surgeons which opened October 13th.

* * *

Dr. J. D. Bell of Pensacola left recently for Chicago where he will take a post-graduate course in obstetrics.

* * *

Dr. L. J. Netto of West Palm Beach spent the month of September attending clinics at the Vanderbilt Hospital, Nashville, and at the Percy Clinic, Chicago. He also attended the Fair at Chicago. Dr. Netto was accompanied home by his family who had visited relatives for two months at Nashville.

Walter Grace, eldest son of Dr. W. H. Grace of Ft. Myers has entered Emory University as a medical student. His brother, Angus, has matriculated at Emory Junior, Valdosta.

* * *

Dr. Leroy A. Wylie of St. Petersburg has returned from an extensive trip abroad, having spent three months in England, Scotland and France. Dr. Wylie did special work at the Edinburgh Infirmary with Professor John Frazier and in the American Hospital in Paris.

* * *

Dr. Ralph Lingeman of Ft. Lauderdale is spending a month in Indiana and Illinois. He will visit the World's Fair in Chicago before his return.

* * *

Dr. Eugene G. Peek of Ocala was recently reappointed by Governor Sholtz to the State Board of Medical Examiners.

* * *

Dr. L. M. Anderson of Lake City returned the early part of October from a visit to his old home in Missouri. En route, he spent some time in Chicago where he visited clinics, conferred with the officers of the American Medical Association and attended the Century of Progress Exposition. His friends will be interested to know that he is much improved after a month's illness and has reopened his office and resumed practice.

* * *

Dr. H. Mason Smith of Tampa attended clinics at Rochester, Minn., the middle of last month. En route, he stopped to visit the World's Fair.

* * *

Dr. E. W. Bitzer of Tampa spent some time in the north last month, visiting clinics at Rochester, Minn., and the Fair at Chicago.

JOSEPH MAX IRWIN

Dr. Joseph Max Irwin of St. Augustine, died suddenly April 19, 1933, of a heart attack while making a professional call at South Jacksonville.

Dr. Irwin was born January 9, 1872, at Iuka, Illinois, son of Dr. Joseph A. and Mary A. Irwin. In 1895 he was graduated from Southern Illinois college with the degree of A. B. From 1895-98 he did special graduate work at Princeton University. In 1898 he entered Washington University Medical School at St. Louis, Mo., and was graduated in 1902 with the degree of M.D. He

was a member of the Alpha Kappa Phi, Chapter of Nu Sigma Nu Fraternity.

Dr. Irwin practiced in St. Louis for one year, being one of the assistant surgeons of the St. Louis Transit Company. He came to St. Augustine, Florida, in 1903 to be associated with Dr. J. K. Rainey, since deceased. On April 5, 1906, he was married to Emma A. Bowker, of Flint, Mich. One son, Joseph M. Irwin, Jr., was born and died October 7, 1907.

In December, 1917, Dr. Irwin went into active service at Camp Johnston, Jacksonville, as Captain Medical Corps. Soon after he was put in charge of Infirmary No. 2, and on March 15, 1919, he was officially detailed Camp Surgeon and Commanding Officer of Camp Hospital, and was there until the closing of the camp. Dr. Irwin was third vice-president of Officers' Club at Camp Johnston; also served at General Hospital No. 28 at Fort Sheridan, Ill., and as Surgeon for 9th Infantry at Camp Travis, Texas. Because of physical disability Dr. Irwin left the Army and was honorably discharged at Fort Screven, Ga., December, 1920. He then resumed practice in St. Augustine.

Dr. Irwin was a member of American Medical Association, Southern Medical Association, Florida Medical Association and St. Johns County Medical Society. He was also a member of the Rotary Club and American Legion, and was an Elder in the Memorial Presbyterian Church. For five years he was President of St. Johns County Welfare Federation, county physician for many years, and a member of the Flagler Hospital Staff.

There survives the widow, Mrs. J. M. Irwin, one sister, Mrs. Charles A. Bainum of St. Petersburg, and several nieces and nephews.

Dr. Irwin was interred in National Cemetery at St. Augustine, with military honors.

(This obituary has just been received from Mrs. Irwin in more complete form than the item published in May of this year and at her request is being published in this Journal).

COMPONENT COUNTY SOCIETIES

BROWARD COUNTY MEDICAL SOCIETY

The following resolutions were recently adopted by the Broward County Medical Society. It was brought out, in a discussion, that the local administrator of the F.E.R.A. in Ft. Lauderdale contends that she has no power to allow more than \$1.00 for a home visit and nothing for an

office visit. Copies of the resolution were sent to the various component societies of the state.

"Resolved that the fee schedule for services to patients referred to us by the Local Administrator of the F.E.R.A. shall be as follows:

Office visits	\$ 1.00
Home visits	2.00
Night visits	3.00
Obstetrics	25.00

"This is in conformity with the bulletin issued from Washington in re: Payment of Physicians for Medical Aid rendered indigent patients who may come under the care of the F.E.R.A., copy of which is enclosed with paragraphs underlined which have evidently been misinterpreted."

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The DeSoto-Hardee-Highlands County Medical Society held its regular monthly meeting at the Nan-ces-o-wee Hotel in Sebring, September 12th at 8:00 p. m. The following members were present: Drs. H. P. Bevis, Arcadia; I. W. Chandler, Avon Park; G. F. Highsmith, Arcadia; G. S. McKnight, Avon Park; L. W. Martin, Sebring; J. A. Simmons, Arcadia, and H. V. Weems, Sebring. Dr. W. A. Weed of Lakeland was guest speaker.

A motion was made, seconded and passed that the Society draft resolutions expressing its sympathy to the family of Dr. J. W. Mitchell, a former member of the society; that a copy of these resolutions spread upon the minutes of the Society and one sent to the widow of the deceased. The President, Dr. J. A. Simmons, appointed Drs. Weems, Chandler and Martin as a committee to draw up these resolutions.

Dr. W. A. Weed gave a very interesting talk on "Diagnosis of Lesions of the Gastro-Intestinal Tract," supplemented by many X-rays and a demonstration of a new apparatus for taking pictures of the intestinal tract. The Society adjourned to meet in Avon Park in October.

DUVAL COUNTY MEDICAL SOCIETY

The first fall meeting of the Duval County Medical Society was held at the Mayflower Hotel, Jacksonville, at 8:15 p. m., October 3rd. This society does not hold meetings during the summer months. The following symposium on traumatic surgery constituted the scientific program:

"First Aid Treatment," F. Oetjen.

Discussion opened by Paul Martin.

"Head Injuries," Harold D. Van Schaick.

Discussion opened by Ralph N. Greene.

"Injuries to the Abdomen," F. J. Waas.

Discussion opened by Robert McIver.

ORANGE COUNTY MEDICAL SOCIETY

The regular meeting of the Orange County Medical Society was held Wednesday, September 20th, in the lounge of the Orange General Hospital with President Hewitt Johnston in the chair.

Dr. T. M. Rivers of Kissimmee read a most interesting and illuminating dissertation on "Fibrositis," in reality a discussion of local infections and allergic reactions in a new guise. His paper revealed a great deal of original investigation on the reaction of histamine and its cousin, iso-amylamine. It is amazing how an active practitioner could find the time to undertake all the laboratory work which his paper entailed.

Dr. T. A. Neal of Orlando read extracts from a personal letter from a physician, who is investigating the St. Louis epidemic of encephalitis. Of the two views, that the disease results from contact or insect transmission, apparently his friend leans to the latter. It seems that the Clay River as a result of unusual and prolonged drought is very low so that the sewage which should empty into it spreads out on the mud flats; that mosquitos, gnats and sand flies are unusually abundant and that the disease itself is confined almost entirely to the areas near this extremely unhygienic and insanitary area.

A report was made by the Committee on Collection and Credit Bureau, the president ordering the committee to continue its work and to return a definite concrete proposition.

The Committee on Credentials reported favorably on the transfers of Dr. W. G. Miles of Chattahoochee and Dr. Grady Page of Jacksonville; both were taken into membership.

An active discussion took place regarding the illegal status of several health associations, it having been discovered that they have been operating without licenses from the insurance department of the state of Florida. This information has been placed at the disposal of the prosecuting attorney of the circuit court. Also, the recommendation of the Philadelphia Medical Society regarding the need of the readjusting the ideas which have for generations influenced the actions of the practitioner of medicine came in for an active discussion, resulting in a number of reso-

lutions offered and carried, which were assigned to various committees to carry out.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

Dr. Leland H. Dame, Inverness, entertained the Pasco-Hernando-Citrus County Medical Society at Inverness. Thursday evening, September 14, 1933.

A full course dinner was served at the Orange Hotel, followed by the scientific meeting in Dr. Dame's office.

Dr. Claude Anderson, now located in Dade City, was elected to membership in the Pasco-Hernando-Citrus County Medical Society. A motion was made and carried that the Society extend to Governor Sholtz its thanks and hearty endorsement for the recent appointment made of its highly esteemed President, Dr. Leland H. Dame, of Inverness, as one of the members of the Florida State Board of Health.

Clinical cases were reported and discussed by all present. Dr. Bradshaw invited the Society to meet with him in Dade City, Florida, October 12, 1933.

PINELLAS COUNTY MEDICAL SOCIETY

The annual meeting of the Pinellas County Medical Society was held in the Assembly Hall of the Power and Light Building, St. Petersburg, October 6th at 8:00 p. m. The following officers were elected for the ensuing year:

President—C. C. Rudolph, St. Petersburg.

First Vice-President—George M. Lockner, St. Petersburg.

Second Vice-President—N. W. Gable, Jr., St. Petersburg.

Secretary—O. O. Feaster, St. Petersburg.

Treasurer—W. C. McConnell, St. Petersburg.

Censors—Robbins Nettles, Clearwater, and H. W. Wade, St. Petersburg.

The statement blank used by the Pinellas County Medical Society is a "happy" innovation. This society has for years had a splendid record in the collection of dues. Possibly the novelty of its collection methods may partially account for this.

"Sad News for Dr. —————"

Pinellas County Medical Society, Inc.

Office of W. C. McConnell, Treasurer

1004-5 Equitable Building

St. Petersburg, Florida.

Statement\$....."

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, Inc.

State Editor

Mrs S. E. DRISKELL

1410 Wadsor Place

Jacksonville, Florida.

OFFICERS

Mrs. E. G. PEEK, President	Ocala
Mrs. E. R. McMURRAY, President-elect	Bortow
Mrs. E. W. VEAL, Vice-President	So. Jacksonville
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Mrs. ROBERT M. HARRIS, Historian	Miami
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COMMITTEE CHAIRMEN

Mrs. A. L. MILLS, Program	St. Petersburg
Mrs. J. RALSTON WELLS, Public Relations	Daytona Beach
Mrs. H. Q. JONES, Hygeia	Fort Myers
Mrs. A. S. WALTERS, Finance	Miami Beach
Mrs. S. E. DRISKELL, Press and Publicity	Jacksonville

GREETINGS TO ALL AUXILIARY WOMEN

As Leader for the coming fiscal year of the Woman's Auxiliary to the Florida Medical Association, I greet you with very best wishes—hoping we may have a most pleasant and profitable year.

When I accepted my present office, I did so fully realizing my incompetency to fill this responsible position in a satisfactory manner, either to myself or to our worthy organization. I was certain then, and am yet, that it was through no merit of my own, you so highly honored me. I want to again express my appreciation for your confidence, and assure you that I deem it a privilege to serve you. I shall enjoy working with women so broad-minded, so intellectual as I know you are.

Let us keep ourselves informed about our own state affairs—about the plans and programs of other states—and learn of our National aims and activities. I am wishing more than anything else that our year together may mean something more than just a tryst at the "Wishing Well."

October finds us ready to resume our work after a short vacation. May I urge your co-operation in all that we may undertake? I believe it was Kipling who said that "success requires the team work of every bloomin' soul"—this applies to us, for without hearty co-operation our most promising projects may become nothing more than sounding brass and tinkling cymbals.

Among our most important undertakings is that of Public Relations. The Bible says that "after man came woman"—history tells us that she has kept behind him ever since. Not so, but she is keeping abreast of man in many things, and one of these is stressing health education.

We are told that the chairman of our Public Relations is the most important member of our auxiliary. This being true, we are indeed fortunate in having as head of this committee, Mrs. J. Ralston Wells, of Daytona Beach. Mrs. Wells was highly commended at our National Meeting, for the splendid work done during the past year. Along this line Georgia Auxiliary reported that with the assistance of the physicians, they had printed 3,000 pamphlets on Mother Welfare for distribution, and with the co-operation of the State Department of Public Health, had mimeographed and distributed about 10,000 copies of three-minute talks on nine subjects. The topics, servant examination, the periodic examination for the silent diseases, blind prevention and sight conservation were emphasized. They are agitating a law requiring health examination for public food handlers.

I regret that Florida fell short last year in our next special work—Hygeia. May we not stress a special effort this year and make Hygeia a part of our daily diet? Louisiana's quota last year was only 40 and they reported 100 subscriptions. Missouri led with 568 subscriptions. Its slogan was—and still is—"They shall not pass." Missouri also gave \$5 and \$10 gold prizes for the best essays on Hygeia in public schools. Oregon came in second with 418 subscriptions. Both Oregon and Louisiana gave gold prizes for school essays.

MANY STATES REPORT LOAN FUNDS

Arkansas helped eighteen young men pull through their senior year in medicine with their Student Loan Fund. California reported a Student Loan Fund, a Loan Fund for nurses and a fund for families of dependent doctors. Georgia, Louisiana, North Carolina and Virginia reported Student Loan Funds. Pennsylvania has a Medical Benevolent Fund. Two counties in Nebraska last year raised \$175.00 for Nebraska's Loan Fund and South Carolina raised \$800.00 for its Loan Fund.

It's not what we'd do with our millions,

If wealth should ever be our lot,

But what are we doing at the present,

With the dollar and a quarter that we've got?

The Hand Book, issued by Mrs. McLaughlin, during her administration as A.M.A. president, is being mailed by our Board to each officer and chairman. This book is filled with helpful information for every member of our association. Please keep it before you—and study it.

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The athlete's mother told him to put his heart over the bar and his body would follow. Let us put our hearts into our work—then good results will follow.

A good thing to know
And a better thing to do,
Is to belong to the construction gang
And not the wrecking crew.

Most sincerely,

(Mrs. E. G.) ELIZABETH HOBBS PEEK,
President.

* * *

Our president, Mrs. Eugene G. Peek, had invited the executive board of the State Auxiliary to be her guests September 8th and 9th for a board meeting and series of delightful social events, concluding with a joint picnic of the Alachua and Marion County Auxiliaries at Silver Springs, but due to the storm it was necessary to cancel these plans.

* * *

Mrs. Eugene G. Peek, President; Mrs. Edward Jelks, Parliamentarian, and Mrs. S. E. Driskell, Press and Publicity Chairman, represented the Auxiliary at the Florida Conference for Mobilization for Human Needs, held in Jacksonville September 15th.

ADVERTISERS' NOTES

G. W. WELLS FOUNDATION ESTABLISHED TO PERPETUATE MEMORY OF FOUNDER

Labor Day week witnessed a gala celebration in Southbridge. It attracted the notice of Lowell Thomas who, on his coast-to-coast radio broadcast of the daily news of September 6, said:

"In a little town of Massachusetts they are celebrating a birthday today—the 100th anniversary of the making of 'specs.' Just 100 years ago American Optical Company began the manufacture of eyeglasses at the quaint Massachusetts town of Southbridge. Everyone there is celebrating, with banquets and parades, quite a *spectacle*."

On behalf of the entire community, the Com-

pany officials were presented with a large bronze plaque in lasting honor of its 100th anniversary. The plaque was received on behalf of the Company by Albert B. Wells, who after a great ovation, and words of appreciation and faith in the future of Southbridge, announced that he and his brothers, acting upon a wish and with funds provided by their father in 1911, would establish the George W. Wells Foundation, in honor of the founder of the Company. The late George W. Wells provided \$100,000 to be used to perpetuate his memory, to benefit the employees of American Optical Company and for such other worthy causes as may arise. The fund, although the interest has been used from time to time for charitable purposes, now amounts to \$250,000, and provision is made in the terms of the Foundation to expand it to \$500,000.

Thus with lasting evidence of deep mutual esteem, the community of Southbridge and its leading industry, joined in a memorable celebration of 100 years of optical craftsmanship.

SODIUM AMYTAL

Sodium Amytal by mouth is reported to be useful in stubborn insomnia, in the prevention of convulsions, and for the production of mental and physical rest in various acute and chronic ailments.

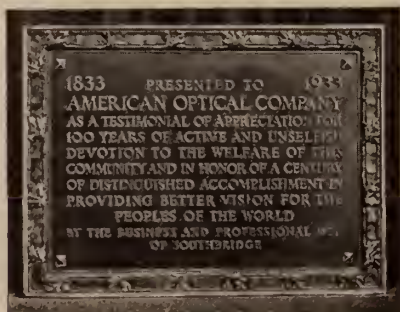
It is emphasized that under ordinary circumstances the advantages of Sodium Amytal can and should be obtained by oral use.

Sodium Amytal Ampoules for intramuscular and intravenous use are indicated in conditions in which oral administration is not feasible either because the patient is unconscious, as in eclampsia, status epilepticus, cerebral hemorrhage, or because he resists, as in delirium or manic psychosis, or because a very prompt action is imperative, as in the control of convulsions of strychnine poisoning, tetanus, or convulsions from the toxicity of local anesthetics. In such emergencies, the parenteral use of Sodium Amytal meets the need for immediate relief and permits effective dosage adjusted to the desired response necessary to control the situation at hand.

Decision to use Sodium Amytal, parenterally instead of orally or rectally, should be made by the physician in the individual case only after carefully weighing the advantages and disadvantages of the injection method.

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PORTRAIT OF A LADY WHO LOVES A DOCTOR

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You can imagine then how gratefully he (and so many of his fellow physicians) welcomed an innovation like Parke-Davis Haliver Oil with Viosterol-250D!

Given in dainty drops instead of terrifying teaspoonfuls, it has simplified and solved the troublesome question of how to administer vitamins A and D scientifically and at the same time *pleasantly*. And it has removed an important threat to the affection that exists



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A single dose of precipitated diphtheria toxoid protects from 95 to 98 per cent of Schick positive children against diphtheria in from six to eight weeks after the injection. The degree of immunity secured in different children ranges from 1/30 to 2 units of antitoxin per cc. of blood serum.

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

of THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC., published monthly at Jacksonville, Florida, for October 1, 1933.

STATE OF FLORIDA, } ss.
COUNTY OF DUVAL }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Stewart G. Thompson, D.P.H., who, having been duly sworn according to law, deposes and says that he is the business manager of the JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION, INC., and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of Publisher, Florida Medical Association, Inc. Post-office address, Box 81, Jacksonville, Fla.

Editor, Shaler Richardson, M.D. Post office address, Box 81, Jacksonville, Fla.

Managing Editor, None.

Business Manager, Stewart G. Thompson, D.P.H. Post office address, Box 81, Jacksonville, Fla.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Florida Medical Association, Inc. (A corporation not for profit—no stockholders). Wm. M. Rowlett, M.D., President, Box 786, Tampa, Florida.

Homer L. Pearson, M.D., President-elect, Huntington Bldg., Miami, Florida.

George C. Tillman, M.D., First Vice-President, 431 W. University Ave., Gainesville, Florida.

Shaler Richardson, M.D., Secy-Treas., Box 81, Jacksonville, Florida.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest, direct or indirect, in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is _____ (This information is required from daily publications only.)

FLORIDA MEDICAL ASSOCIATION, INC.,

By Stewart G. Thompson, Business Manager.

Sworn to and subscribed before me this 30th day of September, 1933.

(SEAL)

W. D. JOBE,

Notary Public State of Florida.

(My commission expires February 21, 1935.)

Form 3526—Ed. 1924.

NOTE.—This statement must be made in duplicate and both copies delivered by the publisher to the postmaster, who shall send one copy to the Third Assistant Postmaster General (Division of Classification), Washington, D. C., and retain the other in the files of the post office. The publisher must publish a copy of this statement in the second issue printed next after its filing.



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SCHEDULE OF MEETINGS—COMPONENT SOCIETIES FLORIDA MEDICAL ASSOCIATION

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon ?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	73%
Bay	Allen H. Miller, M.D., Millville.					67%
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		70%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	100%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	92%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	50%
Duval	F. L. Fort, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	78%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	68%
Hillsboro	C. W. Bartlett, M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	87%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	56%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	88%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	89%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	59%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	46%
Marion	J. L. Chalk, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	79%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	Louis Orr, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	90%
Palm Beach	James L. Carlisle, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	92%
Pasco-Hernando- Citrus	Geo. R. Creakmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	93%
Pinellas	O. O. Feaster, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	93%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	83%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	50%
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	92%
St. Lucie-Okeech- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	100%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	92%
Seminole	J. T. Denton, M.D., Sanford.	2nd Friday	8:00 P.M.	City Hospital Sanford		100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	Jas. L. Weeks, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	71%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	71%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.

3

—about Cigarettes

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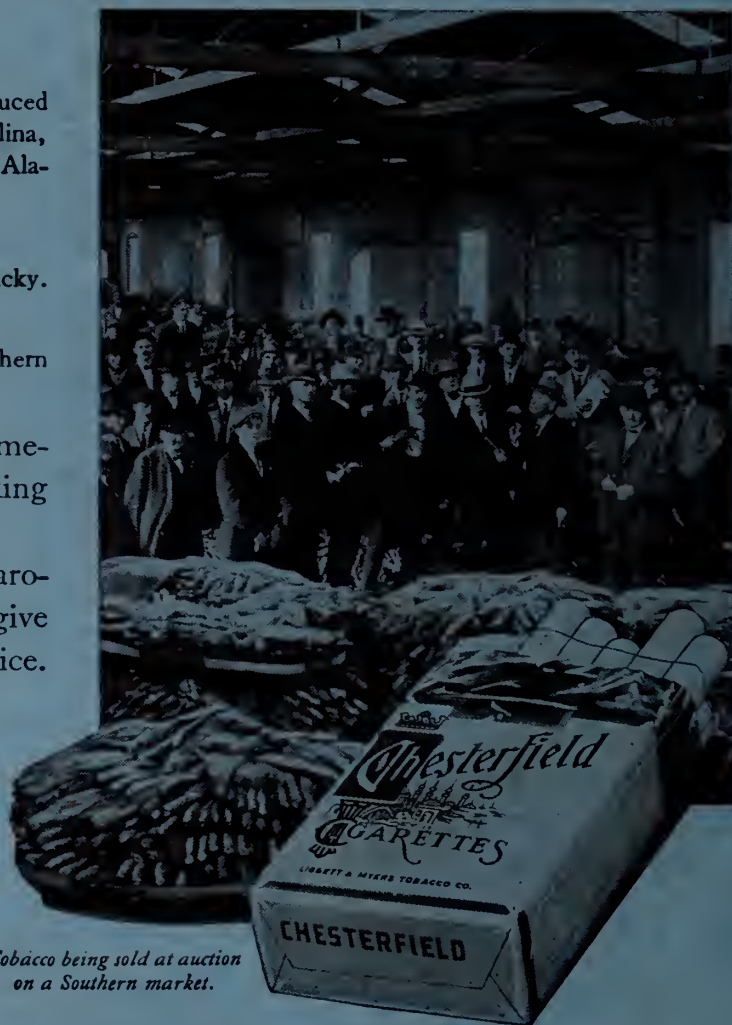
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THE JOURNAL

— OF THE —

Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 5

Jacksonville, Florida, November, 1933

Yearly Subscription, \$3.00
Single Copy, 30c

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Entered as second-class matter under Act of Congress of March 3, 1879, at the Postoffice at Jacksonville, Florida, October 23, 1924

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, November, 1933

Number 5

GRANULOMA INGUINALE*

R. B. HARKNESS, M.D.,

Lake City.

Fox¹ defines granuloma inguinale as a chronic infectious ulcerative process, which usually involves the genitalia or neighboring parts, shows little or no tendency to spontaneous healing, and yields to treatment with antimony and potassium tartrate.

This disease was first described by Conyers and Daniels² in 1896. They believed it to be of tuberculous origin.

Donovan³ in 1905 described the small oval microscopic bodies most frequently found as inclusions in the large mononuclear cells. These have since become known as Donovan bodies, and are found in granuloma with great constancy. Donovan regarded them as protozoa.

This disease, first thought to be tropical in character, and no doubt it is more prevalent in warmer climates, has a very wide geographic distribution, extending as we now know, into the north temperate zone.

Grindon⁴ was probably the first to recognize the disease in the United States, while Symmers and Frost⁵ were the first to call attention to it as endemic in this country. They were also the first Americans to demonstrate the Donovan bodies in their cases.

Since the work of these early writers, there have appeared many papers dealing with various phases of granuloma. Among the most enlightening of these are the papers of McIntosh,⁶ dealing with the etiology, and those of Schochet⁷ and Fox.¹

That granuloma is widely endemic in the United States is proven by the numerous case reports, not only from the South but also from the north and northwestern States. In fact, as Fox points out, most of the case reports are from the North, but many such cases originated in the South. That the disease is so frequently seen in the larger southern centers as to excite little comment is indicated by the statement of Johns

and Gage⁸ that in one year 94 cases were admitted to Charity Hospital in New Orleans. They estimate that several hundred cases are treated in New Orleans annually.

In reviewing this voluminous literature, one is struck with the difference of opinion regarding the several aspects of the disease. This, however, is always the case with any medical subject during the period of research. There are numberless claims, by as many authors, to have isolated the specific organism of granuloma; while many others, having tried and failed, do not believe that it has ever been cultivated. Many have classified it variously with other forms of vegetable life while quite a few (among them, Donovan the discoverer), think it a protozoan. Some authors think granuloma a venereal disease; others disagree. Many ascribe to the Donovan bodies the role of secondary invader, while just as many think them the specific cause of granuloma.

Out of this welter of discussion and difference, there stand out a few points of general agreement. Practically all who have made microscopic study of this disease have found the Donovan bodies. There is also general agreement concerning the specific action of antimony. The disease is recognized as being endemic over a very wide geographic distribution, which includes practically the whole of the United States of America.

Clinically, this disease is seen as an open ulcer, whose surface is covered with coarse granulations. The skin margins are quite irregular, hence one of the early designations, serpiginous ulcer. This raw surface exudes a thin watery or sero-sanguinolent discharge that has an indescribably foul odor. All of these patients give the history of having their trouble start as a small papule that broke down in a short time. However, as a rule, they are not seen by the physician until the ulcer has attained considerable size. In fact, these ulcers are frequently of great size before the patient seeks medical advice. They continue to enlarge, as new skin surface is constantly invaded, and there is little or no spontaneous healing. While usually seen on the skin

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

surface of the genitals and adjacent parts, they have been found on various parts of the body, even invading the rectum, vagina and mouth.

While granuloma is undoubtedly usually contracted by sexual contact, there is much evidence that a break in the skin, or unusual individual susceptibility, play a part in transmitting the disease.

There is surprisingly little systemic disturbance and the ulcers are not, as a rule, very sensitive. The lymphatic glands are not involved, though pseudo-elephantiasis of the genitals has been observed in a number of cases.

Syphilis, chancroid, tuberculosis, and epithelioma are to be differentiated. One is impressed with the frequency of the positive Wassermann in these cases and all should be subjected to this test. A scraping from the ulcer, when examined by a competent pathologist, usually reveals the Donovan bodies and rules out tuberculosis and epithelioma. While exceedingly rare in the negro, epithelioma has been found in this race. And granuloma has been found, complicated with chaneroid and gonorrhea. Most of the cases are among negroes, but whites are not immune.

CASE REPORT

In August, 1932, a negro man, sixty years old, was sent to me, suffering from an ulcer that had persisted for fifteen years. This ulcer involved the right groin and extended down over the perineum to the right buttock. There was very little systemic disturbance, although the patient was poorly nourished. This was attributed to the fact that he had been out of work for over a year. There was little complaint of pain and the ulcer was not particularly sensitive. His clothing was kept saturated with the discharge from his ulcer and the odor was most repulsive. His Wassermann was four plus. Accordingly, he was started on neoarsphenamine in .5 gram doses. This was increased to .9 gram after the second dose. He was given six doses of this arsenical, at weekly intervals, without the slightest improvement. A biopsy was now made, the microscopic examination revealing numerous organisms corresponding in morphology to the Donovan organism. He was now given intravenous injections of tartar emetic, beginning with two cc. of 1% solution as the initial dose, and increasing by two cc. at each dose, until arriving at the maximum dose of ten cc. This was administered at three day intervals. At the time of the third dose, the

ulcer was dryer, and the odor was less. Healing was very rapid and was complete by the time that he had been given ten doses. The dosage was now reduced to five cc., and the time between doses lengthened to weekly intervals, for five doses. The interval between doses was extended to two weeks, and finally to one month. He was given in all two hundred cc. of the solution. He was last seen March 15, 1933, at which time he was entirely well, and the itching in the healed cicatrix, which had persisted for some time after healing, had subsided.

SUMMARY

1. Granuloma inguinale is endemic in many localities of the entire United States. It is probably more prevalent in the South.

2. The probable specific cause of granuloma is an unclassified micro-organism. These are generally known as Donovan bodies.

3. Antimony, usually given intravenously as a one per cent solution of antimony and potassium tartrate, is a specific cure. The safe maximum dose is 10 cc.

4. Many cases give a positive Wassermann. These seem to respond better to antimony, after having been given a preliminary course of arsenicals.

5. The treatment should continue for some weeks after complete healing, to prevent recurrence.

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DISCUSSION

Dr. Elmo D. French, Miami:

Dr. Harkness' paper has a lesson of great economic importance bearing on medical costs to the taxpayers.

A careful clinical conclusion in regard to genito-anal lesions in the indigent patient is exceptional and their hospitalization unnecessarily prolonged.

Usually there is no provision for a proper clinical examination and for good daylight. The patient is examined by casual inspection consisting of a glance from the bedside and the diagnosis hazarded: "It smells like granuloma inguinale. Have the laboratory examine her blood and examine the lesion for spirochetes, Donovan bodies

and the Ducrey Bacilli." Later perhaps a complaint of lack of enthusiastic laboratory support.

The very term granuloma inguinale could just as well be applied to include no less than seven affections of entirely different etiology and evolution occurring as granulomata in the inguinale region and a proper clinical interpretation can as a rule be made.

These include:

1. The ulceration granuloma, so aptly described by Dr. Harkness.
2. Cutaneous tuberculosis, occurring in the vegetative or in the framboesiform variety, mentioned by Dr. Harkness.
3. Syphilodermata of the hypertrophic papillary secondary type or of the gummatous type.
4. Chancroidal ulcerations.
5. Blastomycosis.
6. Vegetating pyoderma.
7. Pemphigus vegetans.

In addition, confluent patches of venereal warts and, as Dr. Harkness mentioned, the vegetative type of epithelioma at times must be differentiated.

Dr. Harkness' case is classical in its slow course and superficial destruction.

Many cases presented are modified by secondary infections or conditions and the Donovan's organism is responsible for only part of the suffering.

We can all follow Dr. Harkness' example and examine these patients. Over a period of years we could save much of the endowment necessary for their care in addition to the relief of unnecessary invalidism.

Dr. Alan Brown, Jacksonville:

I wish to thank Dr. Harkness for his able presentation of a typical case of granuloma inguinale.

These early cases usually respond well to tartar emetic, but occurring as they do in the most uncooperative type of Negro, the patient often disappears before entirely cured and returns some months later in a worse condition than when first seen. At this time the lesion is relatively tartar emetic fast and responds unsatisfactorily to this drug. If the patient is treated with a vaccine made from Donovan body cultures, with or without tartar emetic in conjunction, a rapid and satisfactory response can be expected. The efficacy of Donovan body vaccine in the treatment of this condition is evidence to establish the etiology of granuloma inguinale.

FRACTURES OF THE CERVICAL SPINE BELOW THE ATLAS AND AXIS, WITH REPORT OF TWO CASES*

GEORGE E. W. HARDY, M.D.,
Tampa.

Based on anatomical variations, the spine is divided into three great groups—cervical, dorsal and lumbar. The first two cervical vertebrae, the atlas and axis, are so different in structure from the other five cervical vertebrae that they must be considered separately. Accordingly, in this paper we will consider fractures of only the lower five cervical vertebrae.

Fracture of any vertebra may involve the body or the lamina, or a combination of the two; the interspinous ligament is usually ruptured, and there may be some crushing of the vertebral bodies. One of the common causes of fracture of the cervical spine is the striking of the head by diving into shallow water or striking some unseen object floating in the water. Automobile accidents, in which the patient is thrown head-first against some hard object, cause many of these fractures. Indirect violence, causing a quick snapping back of the head, such as a hard blow on the back, may cause fracture of the cervical spine.

Fractures of the cervical spine vary from the one extreme of no injury to the cord to the other extreme of complete crushing of the cord due to displacement of one vertebra upon another. Usually there is the crushing of the body of one vertebra with fracture of some part of the lamina of the same vertebra or the one above, with some displacement of the upper vertebra forward upon the lower. This often causes a complete paralysis below the level of the lesion; however, the paralysis may be of short duration or may not occur at all. The paralyzed patient, if seen soon after the injury, is conscious and rational but in shock. If the crush of the cord is complete there is total paralysis below the level of the fracture and hyperesthesia in the dermatome supplied by the cord segment corresponding to the level of the fracture. All the reflexes are abolished and priapism is present. The muscles involved depend upon the level of the injury. Injury to the 8th cervical segment will involve the intrinsic muscles of the hand; injury to the 7th will add the extensor and flexor muscles of the wrist; injury to the 6th will include the pronators and the triceps;

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

injury to the 5th will involve the biceps, supinators, and deltoid; injury to the 4th will include the diaphragm.

A careful roentgenologic examination should be made and lateral views are much more valuable than antero-posterior ones. It is difficult but possible to show the 6th and often the 7th cervical vertebrae in a lateral view and it may be very important as the lower vertebrae are those more frequently injured.

Treatment of those cases of fractures of the cervical spine where evidence of cord injury is absent or negligible and where roentgenologic examination shows no or comparatively little displacement, consists in fixation without operative interference, manipulation or head traction even if there is some angulation from crushing of the vertebral bodies. Where dislocation is the main factor, an attempt should be made to reduce it by manipulation, irrespective of the presence or absence of paralysis. This may be done by use of head traction applied by suspension or by the Taylor method in which, with the patient lying on his back and the head extended over the end of the table, the operator makes traction on the head by means of a strong belt fastened about his own waist while his hands are free for manipulation of the patient's head and neck. Fixation is then secured by a cuirass of plaster or of steel and leather, a Thomas collar, or by some patented brace such as the Zimmer or Depuy.

Those patients exhibiting neurologic signs of cord compression or injury or who by roentgenologic examination show evidence of definite narrowing of the vertebral canal should be subjected to lumbar puncture with the view of determining whether or not there is any evidence of block or much hemorrhage into the canal. Those patients with block may be treated in one of two ways, either by manipulation as described above to correct the existing deformity and relieve cord compression, or by laminectomy. No matter which method is used to relieve the cord compression, experience has taught that relief from compression must be given in 24 to 48 hours after the injury, otherwise the fibers of the cord will be permanently damaged, and it is preferable to give relief much earlier if possible. In these early cases with increasing neurologic signs, laminectomy is indicated. Likewise in the cases with stationary neurologic signs with block, laminectomy is indicated, but where the neurologic signs are stationary and no block is demonstrable, lam-

inectomy is not indicated. Moreover it should be emphasized that in these early cases, where there is not much displacement as shown by x-ray and where signs are on the increase, laminectomy should be urged even if there is no block shown by lumbar puncture. When seen by the surgeon more than 48 hours after the injury, laminectomy is indicated only in those cases showing increasing neurologic signs, regardless of whether there is block or not because the chance of improvement from late operative interference is almost nil.

In doing a cervical laminectomy, it is important to have the proper table accessories. Too often the headrest used is a shaky, makeshift affair that screws to the head of the table or it may be simply the ring of a Thomas arm splint improvised for the occasion. The center of gravity is accordingly easily carried away from the middle of the table and the operator is worried by continual shifting of the head. A table can be obtained with an adjustable headrest attached to an extension of the head of the table and also shoulder braces adjustable for height and distance apart. These shoulder braces are very essential because any cyanosis or interference with free breathing will cause marked venous bleeding and this will be a great handicap to the operator. The type of anesthetic used depends upon the individual case but rectal anesthesia is probably the method of choice, either rectal ether or avertin. In those cases where ether vapor is used a catheter passed through the nostril into the naso-pharynx is of great assistance. As for the proper incision, I prefer the curved incision to the right of the spine because it does not produce a scar over the bony prominences. The flap of skin and fat is then dissected back toward the midline and the muscles are stripped away from the left side of the spinous processes and laminae nearly to the point of exit of the spinal nerves. The spinous processes are then cut off with bone cutters and the spinous processes are retracted to the right as the muscles are stripped off the right side of the laminae. The lamina is then attacked toward the side showing the predominance of symptoms. As a general rule as little lamina is removed as possible to inspect the canal but in the majority of these fracture cases the amount of lamina to be removed has been determined by the injury. It is most important to get adequate exposure before the dura is opened. The dura is split in the middle and nearly the

whole length of the bony opening. The arachnoid is then inspected and split and turned back allowing the spinal fluid to run out. If the cord shows local fusiform swelling it is wise to incise it longitudinally to permit blood clots and serum to escape, but the chances are against recovery of function if the cord shows any great area of softening. Where there has been a block prior to operation, it is advisable to ask the anesthetist to compress the jugulars to test for obstruction above the site of operation. Furthermore, a soft catheter can be passed up and down inside the arachnoid and along the cord to feel for an obstruction. The cord may be retracted by a thin flat spatula and the dura in front of the cord inspected. Closure of the dura depends upon whether the operator thinks decompression advisable or not. Very few sutures need be taken in the muscles. The skin is closed with interrupted silkworm gut sutures, usually without drainage.

Pneumonia, bedsores and urinary sepsis are the "betes noirs" of the paralyzed patients. Plenty of fresh air, warmth, avoidance of the horizontal position, and the prevention of abdominal distension do much to allow the proper ventilation of the lungs. Bedsores present a more serious problem. These patients should not be allowed to remain in one position more than a few hours at a time unless some special apparatus is used. The Bradford frame slung from a Balkan frame is serviceable in these cases. Anterior and posterior plaster shells are also a help. Where head traction is to be used, the sawdust box probably suits the purpose best. Stearate of zinc powder is good for keeping the skin dry.

The greatest problem in these cases of cord involvement is to prevent urinary sepsis. Acute retention occurs due to the inability of the patient to relax the bladder sphincter. The act of micturition is part reflex and part voluntary, the latter being reinforced and even superseded by the reflex action. In cases of fracture with cord involvement, there is no spontaneous reflex action to empty the bladder. However, the reflex may be initiated by certain outside stimuli such as stroking the inside of the thigh or lower abdomen, pressure over the bladder and enemas. Such evacuation is usually incomplete but is sufficient for the wellbeing of the individual. Automatic micturition may be brought about by the pressure of the full bladder on the sensory nerve endings in the bladder wall and the posterior urethra and is also usually incomplete. Every attempt should be made to bring about reflex or automatic mictu-

rition before catheterization is resorted to because any infection of the bladder or posterior urethra will prevent the establishment of reflex or automatic micturition. Unfortunately some of these cases will not respond to stimuli nor set up automatic micturition and therefore catheterization must be resorted to. Hexamethylenamin should be started at once as a routine. Catheterization should be done at regular intervals, the bladder irrigated with boric solution and a small amount of 1% mercurochrome or 5% argyrol instilled. If infection of the bladder occurs and progresses, continuous drainage will be necessary either by indwelling catheter or by suprapubic drainage. In occasional cases of cord involvement, retention ceases and complete incontinence occurs which adds to the nursing difficulties but next to the establishment of the reflex or automatic bladder is the best solution of the urinary problem.

The prognosis of the case of cervical fracture depends upon the extent of cord damage which in turn depends upon the degree of initial injury and the duration of cord compression. With cord transection or softening there is no hope of return of function. Death may occur in a few days, usually following a marked rise in temperature, or death may be postponed a few months and occur as the result of urinary sepsis. If the cord is not permanently injured, recovery may take place, usually with some residual paralysis. The bone injury is slow of repair and some form of support to the neck should not be completely discarded under a year from the time of injury.

The two cases to be reported show differences in the amount of cord damage. The first case was handled conjointly with Dr. Earl H. McRae. The patient, a white man, aged 39, was admitted to the Tampa Municipal Hospital on evening of September 18th, 1932, following an automobile accident. He was paralyzed from the shoulders down. X-ray showed fracture-dislocation of the sixth vertebra and the vertebrae supported by it on the seventh. Displacement was well forward and from an x-ray standpoint the cord should have been involved. Fluid block was demonstrated. Laminectomy was done immediately on the fifth, sixth and seventh cervical vertebrae. Before opening the dura, compression could be noted over the bodies of the sixth and seventh. On opening the dura, bloody spinal fluid escaped and the cord was soft and macerated. The patient came through the operation well but died the following day with a temperature of 109°.

The second case was that of a young white

man who was admitted to the Tampa Municipal Hospital on February 11, 1932, at 10:30 p. m. He was injured at 4:30 p. m. that day while diving in Crystal Springs when his head struck a log lying just below the surface of the water. The patient was immediately paralyzed from the neck down. He was carried to Dade City where first aid treatment was given and a posterior plaster splint applied to the head and neck, with the head in a partially flexed position. On admittance to the Tampa hospital, there was complete loss of motor power below the shoulders and impaired sensation over the entire body. The deep reflexes were hypoactive. There was a Babinski on the right, no response on the left. There was partial priapism. Roentgenologic examination showed compression fracture of the anterior third of the body of the fifth cervical with slight separation. The sixth cervical was also displaced forward. Apparently there was cord compression. Laminectomy was decided upon because of the displacement of the vertebral bodies. The fifth and sixth spinous processes were removed. The fifth cervical vertebra was crushed, loose spicules of lamina could be felt on exposing the spinal column. The dura was very dark in color but on incising it and the arachnoid, clear spinal fluid escaped and the cord appeared to be intact. No obstruction could be demonstrated either above or below the site of operation. The dura was not closed. A rubber tissue drain was inserted to the muscular layer on account of the venous oozing. Patient reacted well following operation. A Zimmer Hittenberger brace was applied to the head and shoulders. The following morning, patient moved both upper arms slightly but paralysis was complete from waist down and sensation did not begin to return until the sixth day. The patient suffered acutely with spasm of the bladder sphincter. Efforts were made to establish reflex micturition but to no avail. Catheterization was resorted to, followed by irrigation with boric solution and instillation of 5% argyrol. In this way, bladder infection was avoided and automatic micturition occurred on the 17th day. Patient voided in small amounts and frequently that night; micturition seemed to cause a great deal of pain. At 5:10 a. m. on the 18th day, patient had a convulsion which lasted 5 minutes; pupils were dilated, eyes drawn toward the left, state of unconsciousness the entire day. Lumbar puncture at 7 a. m. revealed fluid with increased globulin. Condition improved somewhat following the withdrawal of

30 cc. of spinal fluid. Indwelling catheter used from 18th day to the 27th day. Slight movement of right leg on 25th day and in toes of left foot on 27th day. From then on, the return of muscular power was very slow but steady. Patient was moved from hospital to his home on 36th day. Soon after that his bowels became markedly constipated and he became toxic, was irrational at times. There was also considerable bladder infection at that time. Moreover decubitus ulcers developed on lower back. His condition seemed very grave. However, by combatting the toxemia, the use of more frequent bladder irrigations and supportive treatment, the patient was carried through this critical period and thereafter had no setbacks. He was moved from bed to chair for first time on the 73rd day. He attempted to stand alone on the 92nd day. At the end of six months could walk about the house without aid, and muscle tone and coordination have steadily improved since.

The important points that this second case demonstrates and the points that compelled me to write this paper are:

First: The absolute necessity in these cases for careful observation and attention by the attending surgeon and for the most diligent and conscientious nursing.

Second: The slow but steady return of sensation and muscular power in this type of case.

Third: The extremely slow healing of the bony lesion as will be demonstrated by the lantern slides.

Fourth: The possibility of using pneumatic traction in these cases.

DISCUSSION

Dr. H. Mason Smith, Tampa:

There is very little I can say about the technique of a laminectomy, but in all the years I have been following up cord injuries I must say the recovery in this case which Dr. Hardy reported is the most spectacular I have ever seen. To see a patient with complete anesthesia and loss of motility below the neck with abolition of all reflexes, with bladder and bowel function gone, and a year later see that man walking around the block with the assistance of a cane, his bladder function restored, is nothing short of marvelous.

The picture that this man presents now of course is one of spasticity. The reflexes are all present and increased. There is a rather unique situation in that the sensation is not disturbed except for the fifth lumbar and first sacral seg-

ments, where on the left side there is anesthesia to heat and cold. This temporary sensory disturbance I think is to be explained only by edema on the inside of the cord. Heat and cold sensory tracts are somewhat central in the cord.

I think the answer to this spectacular recovery is the fact that the cord compression was relieved quickly. Of course, these membranes are more closely united to the cord than they are to the brain and with the edema that may be in the cord—which in itself outside of blood clots produces cord fiber degeneration and softening—the sooner this relief is gained by laminectomy and drainage the more chance we have of not getting softening in the cord.

This man is still improving, and some of the destructive changes and some of the edema which still exists inside the cord promises to be further relieved and he will have a further return of function. It has been indeed interesting to see the rapid progress that he has made.

Dr. J. L. Estes, Tampa:

Doctor Hardy has clearly outlined the important features that need to be emphasized in the care of patients with cord injury following fracture. I wish to discuss the urinary tract phase of this case.

In severe injury of this kind the patient always develops urinary retention and necessarily has to be catheterized. Almost invariably the bladder becomes infected and even with the most meticulous care it is impossible to prevent sepsis. This patient did develop infection in the bladder following catheterization and this was the result of the bladder dysfunction. While in the hospital where catheterization could be carried out under strict asepsis infection did not become severe, but upon returning home the infection reached a high degree and the patient became quite toxic.

Fortunately, Doctor Hardy was able to remove pressure from the spinal cord at which time he found very little destruction of the nerve fiber and he could assure the patient of the slow return of bladder function. The retained or residual urine became alkaline and the urea splitting organisms became active in this stagnant urine and it developed a strong ammonia odor. There are many urinary antiseptics that are used in combating infection, but in this type of case the most beneficial to my mind is hexamethylamine with sodium acid phosphate. I believe it is the acid radical of the drug that is most important. Dilute hydrochloric acid in cases of strongly alkaline

and decomposed urine gives excellent results in keeping down infection and especially so in the prevention of phosphatic deposits.

When the nerve fibers are severed we get a permanent dysfunction of the bladder and the surgeon is forced to resort to permanent suprapubic drainage. These patients are carried along for an indefinite period keeping the reaction of the urine acid and frequently changing the tube. I have many patients wearing suprapubic catheters permanently with very little discomfort. Cleanliness and the acidifying of the urine are keynotes of success in preventing urinary sepsis.

Dr. H. O. Brown, Tampa:

From an x-ray standpoint, I feel that cervical fractures are often so minute that they are overlooked. In the cases that Dr. Hardy has presented there was no difficulty in making a diagnosis from an x-ray standpoint. In my experience during the past fourteen years, it has been very easy to overlook a simple fracture involving some of the cervical segments which produce definite symptoms but very slight x-ray evidence of injury. It is really worth while for the roentgenologist coming in contact with these cases to exercise a great deal of care in the examination of the films, and not be satisfied with a few films. A larger number of films that show complete detail will often reveal fractures that you had no reason to suspect. I have recently seen several cases in which from an x-ray standpoint there seemed to be no bone injury. However, we found suggestive evidence of minor displacement, and by therapeutic tests the fractures were proven because the patient responded immediately to the proper fixation methods with consequent relief of pain and later return of function.

Dr. George E. W. Hardy, Tampa (concluding):

I want to thank the gentlemen for discussing my paper. Also, I want to call your attention to an article by Semms in the April issue of the Southern Medical Journal in which he reports some 120-odd cases of spinal cord injury. I have attempted to bring out in this short paper, first, the fact that it takes so long for bone lesions to heal, and second, experiment with pneumatic traction. I understand that Dr. C. D. Christ has also made some experiments in which he has used pneumatic traction. I intended to ask him to report his findings, but understand that he has already left for home.

EXTENSIVE RINGWORM INFECTION A DISABLING FACTOR IN WARM CLIMATES*

J. LEE KIRBY-SMITH, M. D., ScD.,
Jacksonville.

In addressing you today on the subject, "Extensive Ringworm Infection a Disabling Factor in Warm Climates," you may question the relation of this problem to our work. Accordingly, I will endeavor to lay before you the importance of the subject.

At the 1926 meeting of the Southern Medical Association in Atlanta, the writer presented a paper, "Tricophytosis a Dermatological Problem in the Southern States," and called attention to the fact that from case histories over 45% of patients that were seen in his practice presented ringworm disease, many extensively, and a number at times were disabled by the infection. In a discussion of this report, several members of the Section stated that their records showed a larger percentage. In the last few years a number of accurate surveys in colleges and industrial plants have been made which showed extremely high percentages of infections, some instances as high as 60%. From the slides that I am showing you today you will note the simple intertriginous condition between the little toe of the foot, and this alone, though not disabling and in fact a condition often unknown to the patient, causes him to be a potential carrier to others and may develop and produce a fulminating inflammatory condition.

Ringworm disease or tricophytosis, is a local, communicable and infectious disease of the skin, produced by a recognizable vegetable fungus of the tricophyton group. The parasitic nature of this common skin disease was first demonstrated by Gruby some ninety years ago—to be exact, in 1842. Since that time mycology, which is a study of vegetable fungi, has continually advanced with practical knowledge to the medical profession. Sabourraud of Paris, in his life time study, has particularly classified the various members of the family of ringworm fungi. In this country Ormsby, Mitchell, White, Whitfield, Williams, Greenwood, Weidman, Sulzberger and many others have carried on intensive investigations both clinically and microscopically, so at the



Generalized ringworm disease. Recurrent several years from infection of the feet.



Ringworm disease of right axilla and arm; six weeks' duration. No other lesion.

*Read before the Fourteenth Annual Meeting of Florida Railway Surgeons' Association, Hollywood, May 1, 1933.



Generalized ringworm of the body showing dermatitis from overtreatment.



Ringworm infection of the hand. Courtesy of Dr. G. C. Andrews, New York City.



Ringworm infection of the foot. Courtesy of Dr. G. C. Andrews, New York City.

present time, information regarding ringworm and its complications is not confined to the dermatological profession and it is generally recognized that the disease is extremely common and at times produces serious disabilities.

It would not be amiss to mention some of the various names that are given to ringworm disease, for they are, to the writer's mind, somewhat confusing to the average medical man. One and all of them signify the same disease. A number of years ago the disease was usually designated as "tinea," for instance, "tinea cruris" for ringworm infection of the genito-crural region, "tinea barbae" for infection of the beard, and "tinea tonsurans" for the infection of the scalp, etc., and today this nomenclature is still used. Several years ago in the particular types of ringworm infections of the feet, in which the epidermophyton fungus was designated as the cause, "epidermophytosis" or "epidermomycosis" were used to describe the condition. In recent years the term "dermatomycosis," or "dermatophytosis" has been added to the list. With any use of either of the two preceding names, the parts involved are mentioned, *i. e.*, dermatophytosis of the feet, crural region, etc. To add more confusion, oftentimes ringworm disease is called "trichophytosis," and in the writer's opinion, since we are dealing with an infection due to the trichophyton fungus, technically this is the proper name if we should desire to be scientific. It does appear, on mature thought, that the use of "ringworm" is highly improper. The disease is not caused by any kind or type of worm, though admittedly some of the lesions on some parts of the skin, in their development from a small patch or focus have a ringlike configuration. Since we have another "tenia" (though spelled differently from "tinea"), which designates an intestinal parasitic worm, it is quite conceivable of some confusion.

Since 1928, both in Europe and in this country, a number of investigators have clearly demonstrated that the common ringworm infection of the feet will produce through the blood stream, definite and clear-cut pathology in other parts of the body, especially the skin. This condition has been designated as a "trichophytid" or "dermatophytid," so you will observe that the ranges of focal infection have extended to dermatology.

With these preliminaries the writer will call your attention to the fact that apparently trivial irritation of the feet through irritating and improper treatment, plus secondary bacterial in-

vasion, produce extensive and, at times, disabling or fatal results. With the limited time allowed for presenting my subject I will give you a few case histories which will illustrate the point.

CASE No. 1.—Mr. M., age 50. Insurance business.

The patient was seen at his home Jan. 29, 1929, with an acute infected pustulo-vesicular dermatitis of both hands and feet. Temperature 102. Painful adenitis of the axilla and inguinal region. Duration of his present complaint, three weeks. The condition began after a hunting trip. Itchy, deep-seated blisters formed on the bottom of his feet. At the time they caused discomfort but were not disabling. Irritating antiseptics were applied which aggravated the condition and necessitated a return home from the hunt. The patient gave a history of having had for a number of years, each spring and summer time, some trouble with his feet, particularly of intertriginous irritation between the toes. Though never cured, they were generally controlled.

The few details of this case are given as they are characteristic of many that you will see. The wet, and no doubt neglected, feet plus infection from scratching the itchy irritations and a superimposed chemical dermatitis brought about a severe septic skin infection. This patient was hospitalized and with the very best of medical attention his final recovery required two months of treatment and a complete disability for that time.

CASE No. 2.—Mrs. T., housewife of Waycross, Georgia.

This patient was seen in July, 1930, complaining of a severe itchy inflammation of the genital-crural region. She claimed that the trouble began mildly two days after using a toilet at the Union Station. At the time of her examination she had a sharply defined area of irritation limited to the genital-crural region and extending somewhat over the perineum. This particular case is cited as the husband had mentioned his intention of entering suit for damages. Further examination of the patient revealed active fungus infection of the feet, of a number of years' duration. (Demonstrated microscopically.) Most of the toenails were affected and it is more than probable that the genital lesions could have originated from her own feet and not from a public toilet. On account of general nervous conditions this patient was confined to her room and several



Ringworm disease of the nails of a number of years' duration. Courtesy of Dr. G. C. Andrews, New York City.



Ringworm infection of the toes. Courtesy of Dr. G. C. Andrews, New York City.



Ringworm disease of the hand. Courtesy of Dr. G. C. Andrews, New York City.



Acute ringworm disease of axilla. Courtesy of Dr. G. C. Andrews, New York City.



Ringworm disease of the genital-crural region. Courtesy of Dr. G. C. Andrews, New York City.



Generalized ringworm disease. Several years' duration.

weeks of local treatment required to bring about a complete cure.

CASE No. 3.—Railway trainman, S. A. L. Railway.

The patient presented himself for treatment of an infected dermatitis of both feet and both hands with the following history. For four months with few intermissions he had been unable to carry on his work. For the past two months he had been confined to the house with a recurrent deep-seated, itchy eruption, vesicular in the beginning but pustulation rapidly forming. Various local measures in the way of antiseptic ointments and washes had been used and in most cases aggravated the trouble. The lymphatic glands of the inguinal region were swollen and painful. It was noticed that the nails of his feet showed evidence of ringworm disease. The patient gave a history of trouble with his feet for years. He claimed he had had on successive summers recurrences of the disabling factors of the disease.

CASE No. 4.—Physician, age 45.

The patient gave a history of ringworm infection of his feet, especially the toes, of a number of years' duration. On a number of occasions in the past he had had an infected dermatitis of his legs from scratching. Excessive treatment with X-ray had brought about extreme dryness of the skin and as a result on several occasions superficial infections had produced painful ulcers. These were slowly healed. When he was examined by the writer he had an active ringworm infection of both feet, and an infected ulcer about an inch in diameter situated on the lower part of his leg which had been present for several weeks. There was a slight temperature, noticeable lymphangitis and inguinal adenopathy. Hospitalization was advised but not carried out. After several days the ulcer became very active, deep sloughs developed and the usual picture of a streptococcus infection. This patient was disabled for four months and skin grafting was necessary to repair the defects.

In bringing the subject before you today I am illustrating with lantern slides a number of pictures of clinical, uncomplicated, untreated cases of ringworm disease. I am sure all you have at times diagnosed and treated the disease. As railroad surgeons, being in charge of the health of the employees, and, too, the interest of the railroad companies, my efforts today should bring forcibly to your attention the subject of a com-

mon communicable disease, and the attendant disabilities from overtreatment and improper treatment of the beginning manifestations of the trouble. In closing this talk I would briefly mention two things to consider, prevention of the infection and the appropriate measures to cope with it.

The usual hygienic measures for warm climates are particularly indicated with this somewhat universal ringworm infection. Wearing of cotton underwear and hose and thorough laundering of the same is of primary importance. Thorough care of the feet of the working man is essential. The skin, with excessive perspiration and heat, becomes easily infected with the fungus. In public and private institutions where bathing facilities are used in common, detailed measures should be carried out to prevent infection. The following would be routine directions for the care of the feet for an infected patient:

1. Wash feet daily, thoroughly; dry well and apply borated talcum powder.
2. Once a week clip all toenails and paint around them with 5% mercurochrome.
3. At any time there is itching or softening between the toes apply Whitfield's ointment 3-5 nights and sleep with hose on the feet. Omit bathing feet while using ointment.
4. Wear cotton hose and launder thoroughly, or disinfect silk hose in lysol or bichloride solution.
5. This technique should be followed indefinitely and particularly in the winter.

All cases of ringworm disease do not necessarily have their origin from the focus infection on the feet, but in the writer's opinion, in by far the vast majority, the disease originates on the feet and is transferred to other parts of the body. Such being the case treatment of the feet would be mentioned first.

In the ordinary uncomplicated infections a bi-daily application of Whitfield's ointment or some modification of the same will bring about a cure. If the condition is somewhat acute with a formation of painful deep-seated vesicles a twenty minute soaking with a 1-3000 potassium permanganate solution will add to the effectiveness of the treatment. Both of these measures can be used very properly in the treatment of the infection of most parts of the body.

SLOUGHING OF GLUTAEUS MAXIMUS IN TOTO, FOLLOWING INJURY TO BUTTOCK—CASE REPORT*

L. W. MARTIN, M.D.,
Sebring.

The report of the following case is of especial interest to the writer because no record of a similar case could be found in the literature after an extensive search.

In order to refreshen our memories regarding the anatomy of this muscle, the following is taken from "Grays' Anatomy":

"Glutaeus Maximus. The glutaeus maximus is a large quadrilateral muscle, with a crescentic origin. It arises from, (1) a portion of the area on the dorsum ilia above the posterior gluteal line; (2) the tendon of the sacrospinalis muscle; (3) the dorsal surface of the sacrum and coccyx; (4) the posterior surface of the sacro-tuberous ligament. The fibers which form its superior and lateral border take origin directly from fascia lata which envelopes the muscle.

"The muscle forms a large fleshy mass, whose fibres are directed obliquely over the buttock, invested by the fascia lata, and are inserted, by short tendinous fibres, partly into the fascia lata over the greater trochanter of the femur (joining the ilio-tibial tract), and partly into the gluteal tuberosity. The fascia lata receives the insertion of the whole of the superficial fibres of the muscle and the superior half of the deep fibres. The inferior half of the deep portion of the muscle is inserted, for the most part, into the gluteal tuberosity; but the most inferior fibres of all are inserted into the fascia lata, and are thereby connected with the lateral intermuscular septum and the origin of the short head of the biceps.

"The glutaeus maximus is the coarsest and heaviest muscle in the body. By its weight it helps to form the fold of the nates. It is superficial in its whole extent. *Actions.* The glutaeus maximus is mainly an extensor of the thigh, and has a powerful action in straightening the lower limb, as in climbing or running. Its lower fibres also adduct the thigh and rotate it laterally."

The patient in question is a man 28 years of age, height, 5 ft. 10 in.; weight, 125 pounds; tall and slender in build. He was admitted to the hospital, unconscious, Jan. 18, 1932, at 6:30 a. m. following the collision of two trucks in a fog. Both femurs were broken; the right thigh badly

*Read before Fourteenth Annual Meeting of Florida Railway Surgeons' Assn., Hollywood, Florida, May 1, 1933.

crushed and lacerated. He had a concussion of the brain from a blow on the head and there were many other bruises and abrasions over the body, of which one, on the right buttock, was not considered of any serious consequence in face of other injuries. The right leg was sutured to stop hemorrhage and the patient was put to bed and treated for shock. For several days the patient was in a serious condition and the injury to buttock received no attention. On Jan. 27th, the nurse noticed a swelling and redness of the injured buttock which continued to grow worse in spite of the fact that every precaution was used to prevent irritation to this area. For five days there was apparently slight fluctuation of this area and on Feb. 7th the swelling was incised and a large quantity of pus was obtained. Due to the semi-comatose state of the patient and his other injuries it was impossible to determine just how much pain he had from this source. Two days after the incision of the abscess (Feb. 9th), there was so much swelling and involvement of buttock that patient was turned on his abdomen to relieve pressure and to facilitate dressing of the wound. There was a great deal of pus at all times exuding from the opening. There was a large necrotic mass in the wound of which large portions were cut away several times during dressing of the wound. However, there always seemed to be much left in the wound. On Feb. 13th it was thought best to change the position of the patient and he was again turned on his back. In doing this, a large necrotic mass fell out, which is described by Dr. Mills, pathologist of Tampa, as follows:

"The tissue from R. D. is an elongated mass measuring 13.5 cm. by 6 cm. through the middle portion. The edges are round and tapering. The texture is soft. The surface is covered with some necrotic exudate. On gross section the cut surfaces are of a dull grey color.

"Microscopical sections show a picture of necrosis. The muscle cells are very poorly stained. The cross striations are very indistinct. One of the blood vessels contains a thrombus which is so poorly stained that its structure can not be determined. It occurs to me that this is possibly a thrombosis of the arterial supply to this muscle, which may account for the fact that the entire muscle is apparently involved.

"Laboratory opinion: Necrosis of muscle."

The sloughing of the muscle left a large opening in the buttock the base of which was bones of

posterior pelvis and glutaeus medius. After the muscle came out there was very little drainage and both legs were put up in Russell's tractions.

After a long and stormy illness during which time patient had lobar pneumonia, the buttock healed, leaving a large depression. Both legs united in excellent position.

The patient left hospital in August and rode in a car to Georgia. At this time he had good use of both legs but the right was much weaker than left one.

Several letters have been received from him, the last written on April 25th in which he states: "I have been working for the last four months and have lost only two days' work. I walk two miles night and morning to and from work, and I am sorry I ever left Florida as I know I could hoe as many orange trees as any man down there. I have a weakness in my right leg and knee and am unable to lift anything heavy or climb but there is no pain in the hip."

FRACTURES OF THE CERVICAL VERTEBRAE*

JOHN S. McEWAN, M.D.,
Orlando.

With the increasing frequency of fractures of the cervical spine due to automobile accidents, the diagnosis and proper treatment of these conditions are of paramount importance.

Thirty years ago, your text-book would tell you that most of these injuries were caused by falling out of bed or out of a wagon. Now, the majority are caused by automobile accidents, diving, and athletics. Two per cent of all fractures at the present time are spinal.

As I wish to devote the time allotted to me in discussing the treatment, I will say only a few words regarding the diagnosis. Every patient who complains of the slightest pain in the neck, immediately or at any time after an accident, should have X-rays taken. A number of patients have come to me, who had complained of only slight or no discomfort in the neck at the time of accident (attention perhaps being centered on other fractures or injuries), and whose necks were not even examined. Afterwards, an X-ray demonstrated the lesions.

Diagnosis is often difficult, even with the aid of the X-ray. It is also difficult to obtain good views of the lower cervical vertebrae on account

*Read before the Fourteenth Annual Meeting, Florida Railway Surgeons' Association, Hollywood, May 1, 1933.

of the interference of the neck and shoulder tissues. Pictures of the atlas and axis should be taken through the mouth. These pictures should be taken by an expert technician, who can interpret them. You must have both anteroposterior and lateral views. Stereoscopic pictures are sometimes necessary.

Treatment of these cervical injuries will be considered under three heads:

- 1st. Fractures without cord injury.
- 2nd. Fractures with cord injury.
- 3rd. Fracture—dislocations.

First, fractures without cord injury may include (1) spinous processes, (2) the laminae and arches, and (3) the body of the vertebra or any combinations of the above.

FRACTURES OF THE ATLAS AND AXIS

Jefferson, in 1920, collected all reported cases of fractures of the atlas and added his four more, making a total of 46. Of these 46, signs of cord injury were absent in 19, 11 isolated and 8 complicated. This shows that fracture of the atlas, alone, does not produce the cord lacerations so readily as does a complicated or multiple fracture including some other vertebrae. As a general rule, treatment of a fractured atlas is limited to immobilization of the head in a plaster cast and, unless the articular surfaces are involved, the fundamental results are good. Practically all of the cases of verified fracture of the odontoid process of the axis have had pressure paralysis and in the end have been fatal.

Jefferson, in a comprehensive analysis of a number of cases, finds that treatment will be confined to securing immobility of the head, preferably in a plaster cast of the Lorenz type or in a Minerva method type. Most of the fractures of the cervical spine occur between the third and sixth and, whether or not they are compression fractures, heal satisfactorily if properly supported. It has been found that a plaster cast can be moulded to the shoulders and head while the head is being extended. A mechanical collar is probably the most practical type but is not always handy. Extension can be regulated on these by turning nuts on extended bars.

If the fragments are inclined to be displaced, a halter and weights can be applied for one or two months and then a collar or a spinal splint with head extension can be worn. Support must be worn for a period of from six months to one year.

FRACTURES OR FRACTURE DISLOCATIONS WITH CORD INJURIES

A—Non-operative.

B—Operative.

A—non-operative: simple unilateral rotary displacement with fracture can very often be reduced by manipulation. The method devised by Dr. Alfred Taylor is the most rational. The details of his technique can be found in your text-book; it consists of extension, manipulation and rotation followed by a Thomas collar to be worn for months. Should the patient complain of some pain in the distribution of the brachial nerves or any evidence of spine pressure, efforts of reduction should be stopped at once.

Less severe displacement can be treated by a head harness with weights over the head of the bed, which is elevated. This is continual for six or eight weeks after which a plaster or leather collar can be applied. This may be worn for a long time, depending upon the severity of the symptoms, guided by the X-ray. Care must be taken against sudden jars or rotation of the head.

OPERATIVE TREATMENT

The problem, as to whether in a given case of cervical cord injury operations should or should not be performed, is important.

Any patient showing neurologic signs of cord compression or injury should be subjected to lumbar puncture with a view to determine whether or not there is any evidence of block or of much hemorrhage into the canal.

Elsberg says that "operative interference in a complete transverse crushing of the cord is useless and frequently harmful, but an operation may be urgently necessary, if there is no complete transverse lesion. The difficulty is to determine whether there is a transverse crush or whether the symptoms are due to concussion of the cord or to an acute edema of the cord tissue. In the majority of instances, it is pointed out, a complete motor paralysis and loss of sensation below the level of the injury, with loss of all cutaneous and tendon reflexes and paralysis of the bladder and rectum, point to a spinal cord injury of such severity, that immediate operative interference is contraindicated. If the symptoms are due to spinal concussion, in which considerable lengths of cord are affected, a local operation will do little, if any, good, and it may do much harm.

"If the symptoms are due to an incomplete crush or to compression of the cord, there will

surely be some improvement within the first few days, and then operative interference will offer much better chances of success. When some motor sensory or reflex power remains immediately after trauma, and a complete motor and sensory paralysis later supervenes, operative interference should not be delayed, especially if compression of the cord by dislocated or fractured bone or by blood has been demonstrated." Elsborg states that fully 70% succumb to the immediate or remote effects of injury to the cervical cord.

My opinion is ably expressed by Mixer, who says: "I believe that injury to the cord caused by bony compression, blood clot within or without the cord, or even by edema results in permanent damage to the fibers of the cord if not relieved within twenty-four to forty-eight hours, and that after this time, removal of the compression will not permit these damaged fibers to regain their function. On the other hand, physiologic block without permanent damage may, and frequently does, disappear spontaneously long after this date. The upshot of all this is, that in order to reap any benefit from a laminectomy for cord injury the operation must be performed within forty-eight hours from the time of injury and preferably very much earlier. The exception to this rule is the case in which the evidence of cord compression is increasing.

"Even if lumbar puncture shows complete block, I do not believe that operation should be urged in the late case because the chance of improvement from operative interference is almost nil. In the early cases (under forty-eight hours) where there is not much displacement as shown by X-ray and where signs are on the increase, laminectomy should be urged even if there is no block shown by lumbar puncture. If the signs of cord injury are stationary and lumbar puncture shows block, laminectomy is indicated. This is true irrespective of whether or not the paralysis is complete or partial. We know that decompressive operations are of little value in the absence of block and that the patient had better take his chances without operation unless symptoms are on the increase."

In apparently hopeless cases of injury to the cord, laminectomy may be considered, since in many cases it is the only possibility of improvement. But the final decision to operate, should rest not with the surgeon, but with the patient, or his relatives, after the facts have been explained.

SUMMARY

1. All patients after an accident complaining of the slightest pain referable to the spine should be X-rayed.
2. Patients with fracture of the cervical vertebrae without dislocation or spinal symptoms, can be supported by plaster paris collar, leather collar or any adequate support for a proper period of time and they will fully recover.
3. Patients with fractures with tendency to displacement can be extended by head halter with weights or other extension for six or eight weeks and then proper collar can be worn for months.
4. Fracture—dislocations should be reduced by Dr. Taylor's method and put in collar casts or extension. If impossible to reduce dislocation by manipulation without symptoms of distress, put them in extension for weeks, then collar or supports.
5. Operative procedure, if indicated, should be performed during the first forty-eight hours. After that it is usually hopeless. Consult the patient or family first.

CASE REPORTS

CASE 1.—Mrs. R. B. D., walked into the office complaining of pain in her neck. In an automobile accident she had been thrown out of a car. Physical examination: tenderness over fourth and fifth cervical vertebrae. An X-ray was taken which revealed a fracture transverse process of the fifth cervical vertebra with no displacement.

There being no displacement or symptoms of cord injury, a plaster paris collar was put on in extension. It was worn for six months, after which the patient was pronounced completely cured.

CASE 2.—H. D., on July 14, 1931, dived in shallow water and struck the bottom with his head. He was stunned for a few minutes, but got out and walked home, complaining of pain and stiff neck.

A plaster paris collar was applied in extension and worn until Sept. 5, 1931. X-ray showed displacement. A head halter with weights was applied and worn for three months longer. This was followed by a special brace with head rest, worn for two months. Nearly perfect function resulted.

CASE 3.—A. J. G., who had been injured in an automobile accident, was seen by me on March 21, 1933. An examination revealed a fracture

of third cervical body and probably spinous process with some numbness of both hands.

A pneumatic collar made from inner tube was used. The numbness is improved at present time.

CASE 4.—C. K., suffered a dislocation of sixth cervical vertebra while playing football on November 15, 1932. This dislocation could not be reduced by manipulation, so head halter and weights were applied. Cured.

CASE 5.—N. J. F., was hospitalized on December 22, 1931, as a result of an automobile accident which had occurred the same day. A broken arm was treated and the patient discharged Jan. 4, 1932. March 18, 1932, he came to my office for examination for an insurance company. As his head was carried to one side, an X-ray was taken. Diagnosis: fracture of the sixth cervical vertebra with dislocation.

LYE BURN OF EYES* (OPTICAL IRIDECTOMY)

CASE REPORT

S. B. FORBES, M.D.,
Tampa.

This case so far has given me a great deal of satisfaction and pleasure. The patient, a colored female, age 19, was seen by me on May 7, 1932. She gave a history of having had lye thrown in her face the day before. She could see nothing out of the right eye and very little out of the left. General physical examination was negative; nose, throat, and teeth negative; blood Wassermann negative. There were extensive burns about the whole face; eyelids were burned and very edematous. There was much purulent secretion in both eyes. The right eye showed deep burns of the ocular and palpebral conjunctiva and cornea. In the left eye the burns were about as extensive, but apparently not so deep.

Cleansing measures were instituted; atropine and ammonium chloride drops were prescribed; hot applications, etc.

Instead of returning as advised, patient was not seen again until May 28, 1932, three weeks later.

At that time there was a complete necrosis of the cornea of the right eye. The conjunctiva was in part necrotic and very chemotic, and there was, of course, a marked ciliary injection.

The left eye was improving. The cornea

stained in the central portion with fluorescein, but the injection of the globe was clearing. There was no light perception nor projection in the right eye. In the left eye both were present.

I advised enucleation of the right eye, to which the patient agreed. Enucleation was done in my office under local anesthesia on May 29, 1932. There was much necrosis, extending through the cornea even into the sclera, which made the operation more difficult than usual.

In spite of my best efforts, I was unable to prevent complete synechia from forming between the ocular and palpebral conjunctiva and also between the lid margins. I tried using a sphere strapped into the socket for some time in endeavoring to prevent this scarring.

The left eye quieted down very rapidly after enucleation of the right. The patient was given foreign protein injections and several more blood Wassermanns were negative.

On July 1, 1932, she was using dionin drops and thiosinamine ointment in the eye along with hot applications. She had a complete leukoma of the cornea except in the very upper margin. Her light perception and projection were very good.

I saw her on February 9, 1933. There was considerable secretion of a purulent character in the eye. The eye was white and quiet; the corneal scar was complete except in the upper margin which had cleared somewhat. She had light projection and perception, but no other visual function. Conjunctival cultures were negative, secretion being due no doubt to the altered scarred condition of the conjunctiva—a xerosis.

I advised an optical iridectomy from above, which was done under local anesthesia on February 25, 1933. A keratome incision was made and the iris grasped. It was very fragile and apparently atrophic.

The eye showed very little reaction to the operation. Since then she has been on dionin, thiosinamine ointment and hot applications.

Her vision has improved to a rather marked degree. She is not able to get around well, but she has finger perception, and I am hoping that the corneal opacity will clear more as time goes on. It may be possible to do a corneal transplant later. I hope to make some subsequent report on this case.

This patient was advised that she was hopelessly blind before I saw her. We should be very careful in dooming a patient to blindness in eye injuries.

*Read before Hillsborough County Medical Society, July 11, 1933.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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ACUTE OSTEOMYELITIS

The destructive power of acute osteomyelitis is great. The mortality is high and the period of disability in neglected and improperly treated cases runs into years.

The general idea of the manner in which this infection begins, progresses and ultimately results is extremely vague. An accurate knowledge of the pathology leads to intelligent treatment.

Acute osteomyelitis is a blood-borne disease with a history of trauma about seven to eight days previous (average) and usually associated with an infected tooth, tonsil, sinus or focus of infection somewhere in the body.

The work of Starr on the manner in which acute bone infection spreads is classical and has led to more conservative methods of treatment. Beginning in the metaphysis of long bones (most frequently the upper end of tibia and lower end of femur) the infection breaks through the cortex at its thinnest point—the junction of the epiphysis. A subperiosteal abscess is formed and in the course of a few hours the entire periosteum is rapidly stripped from the entire diaphysis. The infection is limited by the close attachment of the periosteum to the epiphyseal junction. Thus joint infection is a comparatively rare complication except in the region of the hip and the elbow. Contrary to belief, the medullary cavity is infected late and by way of the haversian canals from the subperiosteal abscess. The entire periosteum may be stripped before the medullary cavity is involved. Hence a very radical "gutter" operation may open up new channels for infection.

Keeping this pathology in mind an incision should be made at once over the infected end of the bone just below the epiphysis and a few drill holes placed in the upper end of the metaphysis or cancellous bone to relieve pressure. The bone should be unroofed only when pus is found and only as far down the shaft as pus is obtained. Simple incision and drainage is all that should be done in extremely ill patients.

ALL HAIL THE ALLERGIST

For many years we have known that the excessive use of tobacco, more especially when the fragrant weed was burned and the smoke inhaled, may lead to disturbance of vision, loss of weight, irritability, irregular heart action, hypertension, indigestion and possibly many other handicaps,

though somewhat less disturbing. Many, even who claimed to and possibly did use it in moderation, suffered similar disturbances. It has generally been considered that these latter unfortunate ones were not as resistant to nicotine intoxication or as healthy as the former group.

But now the "cat is out," although it has been suspected for some time. In a comprehensive series with the patch tests, Sulzberger* of the Montiflore Hospital, New York, demonstrated that whereas nicotine may not be without injurious effect, it probably is not the dominant pathogenic agent in the many symptoms commonly attributed to it, including not only those which are experienced by the beginner in its usage, but also in the train of associated cardio vascular diseases.

This opens up a new field for the allergists. Already he tells us what we should eat, or better, what we should not eat, nor wear, nor inhale, but now we may go to him and by patch tests with tobacco extracts find whether we are sensitive to them, *i. e.*, whether they may be harmful to us. What a blessed relief! No more need to argue with our patients as to the harm in cigarettes, cigar, pipe or even the delightful piperheidsieck. A note to our allergic friend and, presto! the patient comes back to us properly classified. Not only may we determine whether he is sensitive to tobacco, but furthermore, it can be shown just what special brand is the least injurious to a certain individual. No more need we hesitate and argue as to the merits of aging in special casks or bales or the virtues of the much-advertised toasting process.

We all know how definite is the influence of certain pollens or dusts upon certain individuals toward inducing asthma, etc. Now also we have the positive assurance that a certain brand of tobacco will or will not harm us, save as a hot acrid vapor is bound to irritate such delicate mucous membranes as those which line our respiratory tract.

*Sulzberger, M. B.: *J. Immunol.*, 24: 85, (Jan.), 265 (March) 425, (May), 1932, and *Bull. N. Y. Acad. Med.* 9:294, May, 1933.

PATRONIZE JOURNAL ADVERTISERS

Advertisers in our Journal bear the stamp of approval of the American Medical Association and also of the Florida Medical Association. They are worthy of the patronage of our members.

PHYSICIANS' BUSINESS BUREAU AS
OPERATED BY THE PINELLAS
COUNTY MEDICAL SOCIETY

W. C. McCONNELL, M.D.,

St. Petersburg.

After much delay, it dawned upon us that we were victims of fraud, because we had no credit bureau. Dishonest patients received ample medical care without pay, by traveling from one to the other of us, and we had no way to know of their dishonesty until each of us learned by costly experience.

Our City Credit Bureau would not give us a "blanket rate" for credit information. It offered to render credit information to us individually at \$24 a year, without bulletin service. This was too expensive and, without bulletin service, would have been unsatisfactory. One must have credit information at his "finger-tips" to enable him to accept or reject a call placed by 'phone.

Therefore, we launched our own credit bureau. It was approved by the legal advisors of the Florida Medical Association. The St. Petersburg Dental Association adopted the same plan, and our First Annual Catalog of Delinquent Accounts is compiled from the combined files of both Bureaus.

The Catalog is a mimeographed publication distributed to all members with an optional bill for \$1 attached. The profit from it about covered earlier expense. It is supported by quarterly supplements of additional accounts offered for publication and notices of withdrawn accounts. The whole is bound with an "Acco" Binder, and the supplemental issues perforated to fit.

But because some members are shy and others slow, we began the service by printing 3" x 5" cards for each office file. The printing was done by using an Elliott Addressing Machine. One of the committeemen furnished the labor to install the plan. This is not to be recommended and should be done by a high school boy as part time employment. The dentists employed a college youth and were more successful, because he called for accounts and delivered the cards. Withdrawn accounts were noted as they were received by the Bureau by adding "Withdrawn" to the used stencil and including it in the next lot of cards. The Bureau's file must be absolutely

accurate and alphabetically arranged in exact detail. The card system is recommended to be continued, even after a catalog is published. The catalog may be used well to correct the card file and taken home for information after office hours.

The Bureau issued letters of warning that an individual's account was about to be offered for publication. This was not approved by legal counsel, so the letters were revised to read as though sent by the physician. Supporting this publicity, a paid advertisement was inserted in all papers of the Bureau's inception and later, another stated that the Catalog was about to go to press. "Scandal sheets" were not omitted, primarily to keep their editors quiet from vicious editorials about our hard-hearted congregation. Over 350 withdrawals have been authorized. One member stated that he had received about \$300 in one day following letters.

Code is used in both card files and catalogs. This is to avoid embarrassment in case of an unauthorized person securing a form. The code may be explained by example: Doe, John, 123 n4s, 036-40-30. This means that Mr. John Doe of 123 4th St. No., St. Petersburg, Fla., owes Doctor Number 36, \$40 with date of last service in 1930.

We recommend that all County Societies establish a system by which one catalog, at least, a year may be distributed without cost, to the Chairmen of Medical Economics Committees of all other Societies in the State, with hope that the district may eventually include our southern state neighbors. This interchange will solve our inter-city problems. The catalog of each society could be distributed to the members of the respective society in addition. State-wide publicity of our system will inhibit delinquency.

Besides, we have approved a retainer fee for major work and will propose a credit application form to be completed and investigated before much credit will be granted.

A few of us will probably do all our billing through a central corporation. This service will be open to all members of the Society.

RADIO BROADCASTS, 1932-1933

The following broadcasts were arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

THE LAME, THE HALT AND THE BLIND*

F. L. FORT, M.D.,
Jacksonville.

We hold that all men are created equal and have the right to life, to liberty and the pursuit of happiness. These words are taken from the preamble of the Constitution of our country. Even though we should possess equally these rights, unfortunately some of us are handicapped in our pursuit of happiness. In some instances our handicaps are social, in some financial, and in many cases physical. Physical handicaps may be due to defects at birth; or a result of disease or injury after birth. Physical handicaps render the pursuit of happiness very difficult, and sometimes destroy it altogether.

Primitive man left his weaklings behind to be destroyed by his enemies, either man or beast.

Medieval man left the cripple in his unhappy state—ridiculing him, and sometimes burning him at the stake as a witch, or one possessed of the devil.

Our modern man's ideal of today is either to prevent or correct deformities, and thus restore the physically unfit to as nearly normal as possible.

The lame, the halt and the blind are just now being recognized as having equal rights to trained minds and trained bodies. It is only within the past generation or two that much could be done for the cripple.

We still possess the right to pursue happiness, but our ability to pursue it is impaired or destroyed altogether. It seems that one with physical handicaps is entitled to all, or more, of the privileges enjoyed by a healthy citizen.

In 1929 at Geneva, Switzerland, the world conference of workers for crippled children adopted a resolution: "that every cripple has the right to expect of his state or country physical, mental and social equality."

We might define a cripple as one who by reason of congenital, or acquired defect of development, disease or injury, is deficient in the use of his body or limbs. In spite of our modern civilization and boasted democracy, many of our fellow citizens are discriminated against or neglected by us. They are not able to obtain adequate education. Neither are they able to successfully pur-

sue gainful occupations. The larger portion of our physically handicapped are more desirous of obtaining an education, and in greater need of education than those without physical handicaps. It is not within my province to talk about the mental training of the cripple, but about the physical restoration of the cripple. As a member of organized medicine, I feel more competent to tell you what can be done for the cripple in training his body than in training his mind, although each are equally important.

Never in the history of the world has it been possible to correct physical deformities so successfully as in this age. Corrections of deformities routinely accomplished today, would have been considered miracles a century ago. Not all physical deformities can be eradicated of course, but many of our dependent crippled population could have been cured of their deformities. The great majority could be materially benefited; and made self-sustaining. As an economic undertaking, the problem is worthy of serious consideration. No estimate can be made of the relief of human suffering and misery, which would result from elimination of the cripple from our midst. The ideal state of affairs would be prevention of all physical diseases and deformities. This ideal is gradually being approached, but will never be fully attained. There are some diseases, like infantile paralysis, that medical science has not yet conquered. There is an ever-increasing number of automobile accidents and other industrial hazards, which take an ever-increasing toll of human life.

One hundred and ten people were killed each day in the U. S. in 1931, an increase of 500% since 1913. Five hundred and sixty auto deaths in 1930 in Florida. Five hundred and fourteen auto deaths in 1931. Thirty thousand auto deaths in the U. S. annually, with over 1,000,000 people crippled and injured. These figures tell only a part of the story. It can readily be seen that much remains to be done in the prevention of the lame, the halt and the blind.

Medical science today is able to prevent the well-known "hunch back" deformity. If not neglected too long, it can be corrected after it has been acquired. Club feet are no longer considered a "curse from God," as in ages passed. This unsightly deformity is easily corrected in early life, but not in adult life. Many broken bones result in permanent disability because of human

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, February 5, 1933. (Delivered by Dr. H. C. Dozier, Ocala.)

ignorance and neglect. Even blindness could be practically eliminated by proper medical care rendered at the correct time. It is a tragedy that so much human disability and suffering is largely preventable, but not prevented. The reason is because the public does not know how to use the medical knowledge now available. It is to the best interest of the public to have the most competent medical profession possible. One of the prime obligations of the medical profession is to see that its services are available to all mankind. A second objective of the medical profession is to inform the public how to avoid disease (preventive medicine) by the practical application of knowledge already acquired by the profession. Doctors realize that it is possible to prevent, or control, the majority of our most dreaded diseases.

My appeal to you today is in keeping with this last thought. Because of lack of information as to what to do, and what *not* to do, several thousand cripples needlessly develop in our midst in each generation. For example: there are scores of blind people in this state whose sight could have been saved, or could be restored, by proper expert surgical care. We are just beginning to realize the fact that prevention is now possible. We do not consider restoring eye-sight as a miracle any longer; it is done by the application of known scientific facts. Likewise, the correction of deformities, like bow-legs or spinal curvature, is accomplished only by those who have spent many years in the study of the laws of nature and the scientific application of these laws. The modern surgeon must have an intimate knowledge of physics, chemistry, biology and bacteriology (as well as the treatment of disease with drugs). To acquire this knowledge is not sufficient. He must still spend years of apprenticeship in perfecting his skill or technique in applying this knowledge, to successfully remould or remodel the human body. There is no "short cut" nor "royal road" to human knowledge of any kind. Certainly, there is no short cut for one who proposes to take human wrecks in his hands and reconstruct them.

The master physician of today must have detailed knowledge of the workings of the human body as a whole. Our best trained physicians realize their own limitations. Also, they well realize the far greater shortcomings of those not properly trained in all the sciences composing modern medicine. Any improvement in the

standard of medical practice must come from the public. The good physician cannot suppress the incompetent physician. The solution would seem to be in raising the *legal* requirements of those who undertake to treat human disease. By thus raising the medical standards, and by teaching the public the facts now known about disease, the number of physical handicaps can be reduced and the sum total of human happiness greatly increased. For *health* is man's greatest earthly treasure. Without healthy bodies, there can be but little happiness. It is to the best interest of all of us, to have each of us as healthy as possible.

MEDICINE AND COLONIZATION*

HENRY HANSON, M.D.,
Jacksonville.

To the majority of people in these days, the word "colonization" does not bring to mind any actual experience of pioneering. Indeed, to the modern younger generation, adventure seems to consist of testing the speed of some new car or gliding through the ether in a newer make of airplane. Most of us have read "The Covered Wagon," Rolvaag's "Giants in the Earth," or Ober's "Emigrants" or have seen at least one of them in the movies. We have been told in our schools of the hardships and suffering of the pilgrim fathers and of their descendants who traveled to the west. But (from the vantage point of a comfortable chair or a warm fireside) the reality is hard to catch. Who of you has heard the dismal moan of the blizzard with winds of hurricane velocity, or (away out on the frontier) the howl of a coyote on a clear moonlit night when the ground was blanketed with snow? Have you heard the blood-curdling cry of the laughing hyena or the roar of the lion as you have strayed beyond the realms of human habitation, an invader of the domain of those who first possessed the forests and prairie lands? Yet these are inevitable preliminaries to colonization, of which the survivors can speak if they will.

It might seem that it should be easy to portray some of the experiences of the pioneer, the more so if one has been a part of it in both this and other countries, but it is strangely difficult. The recollections of the early days on the western prairies, where a neighbor's residence would be recognized by a spiral of smoke issuing from a

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, February 19, 1933.

flue projection above the ground on a hillside, (if in a territory where there were hills high enough to permit the one room "dugout" or a sod shanty), would bring out tales as fantastic as those of Billy Bowlegs in the comic strip "Freckles." For those who live in this age of electricity, automobiles, airplanes, and the various marvels of radio engineering, it is difficult to picture the home where the wool is grown on the sheep on the range, and that same wool sheared, carded, spun into yarn, knitted into socks, mittens or what not, and worn by those living on the place. Can you picture a thread of heavy yarn dipped into tallow prepared from the steer which has just been slaughtered to form the winter's supply of beef, dipped again and again until you have a candle to furnish light during the long wintry night? Such was the practice before the days not only of electricity but before those of the kerosene lamp. The kerosene lamp and the hurricane lantern were then as great forward steps as the electric bulbs or the incandescent lights of the present day. Also in the early days they spun the yarn and wove the cloth from which the clothes were made. (You can see some of this today among the primitive people of the earth).

All that has been mentioned has been experienced by the speaker and must therefore be regarded as entirely modern, although forming a part of a phase of colonization.

Colonization implies the transplantation of a group of human beings from an environment to which they are accustomed to one which is new and different. It has always been attended by unnecessary suffering and loss of life. Those who set out to colonize have had to learn by bitter experience. In this talk it is hoped to show the relationship of medicine and colonization, or probably the results of the lack of medicine during the early history of America.

In all new ventures of the present day medical care is predicated as essential to success. This fact was not always recognized, and there are many instances of failures or near failures of new projects because of the high rate of sickness among the people involved.

No State offers a greater historical record of colonization than Florida. But the romance and legend of the Spanish and French conquests of Florida is marred by the constant presence of disease which struck down the adventurers in greater numbers than fell by the arrows of the hostile Indians. Perhaps the most tragic of these

expeditions was that one made famous by DeSoto, who landed at Tampa Bay with an impressive company of heavily armed soldiers. The expedition which had started so triumphantly ended with only a pitiful remnant surviving, and DeSoto himself dying of fever at the Mississippi. All but a handful of his men had died of disease.

When the French built and occupied Fort Caroline we know that they did not venture to wander inland because of the fevers that lurked in the forests and jungles where the city of Jacksonville now stands. When the English came into possession of Florida in 1763 they found the principal obstacle to the settlement of the new province lay in the threat of tropical diseases which in many cases utterly wiped out colonies along the St. Johns River and the Atlantic Coast. Again when our government took over Florida it was many years before settlers dared to come south below Tampa on the west coast or New Smyrna on the east coast. And during the Seminole War the bite of the mosquito was more deadly than the Indian. The history of Florida has been the record of conquest of the tropics by health-giving medical care and sanitation measures.

When in 1618 Francis Blackwell attempted to bring a colony of 180 Puritans to Virginia, 130 died on the voyage, including Blackwell himself. In 1682 the ship which brought William Penn to America lost 30 of the company by smallpox. In both of these instances smallpox was the principal killer. At this time none of the bacterial causes of disease had been discovered. Although many important observations had been made on the nature of disease, most of the medical men of the time were working in the dark, hindered by the superstition of the ecclesiastics and various of the fanatical religious sects. Although there are authentic records of medical practice among the Egyptians as early as 2300 B. C., and of the setting of broken bones as early as paleolithic man, about 30,000 years ago, it was not until the second half of the 19th century, A. D., that bacteria were found to be the specific cause of sickness. Many of the early physicians recognized the need of cleanliness, especially in the treatment of wounds, also that some diseases seemed to be transmitted from one person to another, and recommended segregation. Leprosy seems to have been the first of the communicable diseases to have been recognized as definitely communicable from one person to the other. In the last few years an unfortunate tendency has developed

to minimize the danger of the communicability of leprosy, and I want to take this occasion to warn the people against such teaching. The misleading thing in leprosy is the long interval of incubation, sometimes running into several years. A Danish physician by the name of Hansen discovered the germ (a bacillus) of leprosy (in 1871) which makes it possible to make a fairly prompt and accurate diagnosis in all cases. All who have leprosy have a definite history of contact and association with other lepers.

Samuel Fuller, who came over on the "Mayflower" in 1620 is said to have been the first practitioner of medicine in Massachusetts. His wife served as a mid-wife, as it was considered beneath the dignity of physicians or surgeons to do obstetrics. There is an interesting account of his attempt to help and advise the disease-ridden colony at Charlestown, where due to lack of proper shelter and food, and the insanitary location, every family had lost at least one member before they moved to the healthier site on which now stands the city of Boston.

The early scourges among the colonials were dysentery, diphtheria and smallpox. These took a terrific toll in Virginia. The total number of settlers in Virginia in 1621 was estimated at 4170. In 1624 there were only 1800. Of those who had perished 349 were killed in the Indian War of 1622, and 2021 died from curable or preventable diseases. The colonials often remarked that the only compensation they had from the ravage of smallpox was that it also destroyed the Indians, (and they need not fear an attack during an epidemic of smallpox).

Smallpox continued to be a serious scourge until some of the bolder men began (to put in practice a custom which Lady Mary Montagu brought back to England from Turkey, namely) the inoculation of smallpox material for the prevention or amelioration of the disease. Dr. Boylston of the Massachusetts colony appears to be the first to practice this art in America. On June 7, 1721, he inoculated his son and two negro servants with success. After this, inoculation hospitals were established and flourished until Jenner introduced the cowpox vaccine which reduced smallpox in the colonies by 75%, and its continued use has almost eliminated the disease from what we choose to call civilized countries. For example, there has not been a death from smallpox in Florida for several years.

Diphtheria was one of the most dreaded dis-

eases among the colonials and continued taking many lives until the medical men of the latter part of the 19th century (Klebs-Loeffler) discovered the diphtheria bacillus and Roux the toxin which it secretes and later Von Vehring developed a diphtheria antitoxin for the cure of the disease. Among the great names in connection with the momentous discovery of the germs or bacteria causing disease are Pasteur, Koch, Klebs, Loeffler, Neisser, Roux, Laveran, Lister, Ross, McCallum, besides many others.

For recent examples of the effect of medicine on colonization we can go to our own American tropics, to Havana, Cuba, in 1898-1900, and behold the epoch-making proof of the mosquito as the carrier of yellow fever. The *Anopheles* mosquito had previously been proven to be the carrier of malaria. This led to the cleaning up of Havana, and made possible the building of the Panama Canal by our country. It was in the building of this canal that rulers as well as construction engineers were made to realize that it is first necessary to overcome the handicap of disease before progress can be made on any great project, be it what it may.

From that time on, all great enterprises have been undertaken after taking precautions against the hazards to health or the diseases indigenous to the locality.

Potentially, medicine has conquered the world. It has made possible a colonization of all parts where the climate is consistent with human living and the pursuit of happiness.

Herophilus, the great Greek philosopher in 300 B. C., wrote "Wisdom is indemonstrable, art uncertain, strength powerless, wealth useless and speech impotent if health be absent."

REPORT OF COMMITTEE ON CANCER CONTROL

At the State Association meeting in Hollywood, the Association voted to have a committee which would cooperate with the American Society for the Control of Cancer in the work which this Society is doing along the lines of public health. Dr. Rowlett appointed on this Committee the following men:

Gerry R. Holden, Jacksonville, Chairman; J. C. Dickinson, Tampa; Frederick K. Herpel, West Palm Beach; James M. Hoffman, Pensacola; Gerard Raap, Miami.

A preliminary meeting was held in August in Orlando and a second meeting was held in Tampa

on October 15. At this last meeting, various plans for its work were considered and the following activities were adopted.

In order to facilitate the work of the Committee, the State has been divided into sections, each member of the Committee assuming charge of the work in his section. It was decided to call upon the Woman's Auxiliary and the various Councillors of our Association to help in the work.

It is generally recognized that in order to get cancer cases early so as to cut down the rapidly increasing death rate from these conditions that work must be done not only with the laity but with the profession itself. Doctors must become more "cancer minded" and more alert than they are at present to recognize the early symptoms of these conditions.

Therefore, it was decided to provide facilities whereby each County Society could hold, at least once during the year, a symposium upon cancer. The Society will, for this purpose, provide the various County Societies with most valuable films, slides and other data to be used.

Numerous methods were discussed regarding the work of making the public at large more alert to the early symptoms of cancer, and of dissemination to the public certain facts regarding these conditions which it seems appropriate for the public to have.

Along this line, it was noted that the American Federation of Women's Clubs has requested that the State Association in various States be ready to supply speakers on these topics who shall appear before various women's clubs when requested. The Committee planned to have speakers in readiness throughout the State to answer these and similar demands. Moreover, it felt that, while it was not advisable to solicit invitations for speakers before lay audiences, at the same time when it was known that such speakers were in readiness, numerous invitations from lay organizations would undoubtedly be extended.

The Society has at its command a large number of newspaper releases and radio broadcasts intended for the lay public which it will send on request. The Committee arranged for a plentiful supply of this material to be sent not only to the Public Relations Committee but also to the broadcasting committees of the various County Societies throughout the State.

The question of distribution of literature published by the Society by the cooperation of the

State Board of Health was also taken up. Inasmuch as cancer control is a public health matter, it was felt that such cooperation could be secured but it was decided to postpone any contact with the State Board of Health until there had been a definite selection of the State Health Officer.

Instruction of nurses, graduate and undergraduate, regarding the various phases of cancer, especially in women, was carefully considered. It was decided to make contact with all the training schools in the State to see that literature was placed in the hands of every graduate and undergraduate nurse in the State and that each training school be stimulated to particularly embrace in its course specific instructions for undergraduate nurses along these lines.

MEETING OF FLORIDA PUBLIC HEALTH ASSOCIATION

The St. Petersburg meeting of the Florida Public Health Association offers an opportunity to the citizens of the State equal in educational value to what is found in some of the large national conventions. The original purpose of the annual gathering of the health workers in the State was to give the nurse, the sanitary officer and the health officer an opportunity to report on problems which had been met in the daily routine and obtain advice on how to handle them. At first a few of the nationally known authorities were invited to discuss some vital issues. The response from the guest speakers has been most gratifying and each year after the first meeting it has appeared that there have been more and better papers. It now looks like an Institute in Public Health.

The program to be presented in St. Petersburg on the 3rd, 4th, 5th and 6th of December is of a truly outstanding nature. The convention opens on Sunday afternoon in a Conference on Social Hygiene which will be presided over by Mrs. W. M. Ball of Jacksonville with Mrs. Margaret Wood of the American Social Hygiene Association, of New York, as the principal speaker. After Mrs. Wood's address the leading features in venereal disease prevention will be taken up in a round table discussion. All who are interested in what has been spoken of as the greatest of public health problems should attend this meeting.

On Monday, December 4th, at 9:30 a. m. the first general session opens by an invocation and a series of welcoming addresses by St. Peters-

burg and Pinellas County officials and the President of the State Medical Association which will be followed by a response and presidential address by Mark F. Boyd of the Rockefeller Foundation who is President of the Florida Public Health Association.

The following addresses are of more than usual importance to those who are interested in child hygiene and public health nursing. Dr. W. T. Harrison of the U. S. Public Health Service will bring the latest information on the improved methods of protecting children against diphtheria. Dr. Harrison will speak on the new development in the one dose toxoid which seems to be the most promising thing yet developed in diphtheria prevention. This is of special interest to physicians as well as to the laity. It will be worth the trip of any doctor to hear this address. This will be followed by Dr. Estelle Ford Warner of the U. S. Public Health Service who will discuss a child hygiene program. Dr. Warner's address will be of great interest to the Federation of Women's Clubs and to the Parent-Teachers Association. Dr. Warner has been in great demand in various parts of the United States in the development of child hygiene. Following Dr. Warner will appear another national authority in Miss Alma Haupt who is the Associate Director of the National Organization for Public Health Nursing. Miss Haupt will tell what a logical practical nursing program should be in a state health organization and will point out how the local nursing group can coordinate and work with that of the central organization.

The afternoon opens with Dr. N. A. Baltzell, the President of the State Board of Health, presiding and a paper from the representative of the American Public Health Association on "Health Conservation Contests." There are many people who do not know what this great work of the National Chamber of Commerce is. Dr. Buck will point out how it dovetails with a general public health program. Dr. F. C. Metzger of Tampa will follow Dr. Buck on a topic which vitally concerns a great many people throughout the whole nation. While "Hay Fever" is Dr. Metzger's topic, hay fever and asthma are closely associated and more information is needed on these two troublesome afflictions of mankind. The afternoon will close with a discussion of communicable diseases by Dr. F. A. Brink and a number of his associates.

Our principal guest speaker is Dr. Henry F.

Vaughan, Health Commissioner of the City of Detroit, Michigan. He will deliver an address at Tampa Monday on "Preventive Medicine from the Family Physician." It is one which is of vital interest both to the physicians and to the laity.

Some other features of the program will be a presentation of the midwife problem by Miss Joyce Ely, Acting Chief, Public Health Nursing Division, State Board of Health; some observations on maternal mortality by Dr. T. F. Murphy of the U. S. Bureau of Census and Infant Mortality by Dr. W. Thurber Fales, who is Registrar of the Alabama Department of Health. This is to be followed by a symposium on insect borne diseases where Dr. W. E. Dove and Dr. W. V. King, both of the Bureau of Entomology of the U. S. Department of Agriculture present two leading topics. Next will be a report on malaria surveys by Dr. T. H. D. Griffiths of the U. S. Public Health Service and Dr. Paul Eaton of the State Board of Health Laboratories.

The afternoon of the second day will be given over to engineering problems, a round table discussion directed by Mr. Lenert, Chief Engineer, State Board of Health, and a discussion on public health nursing presided over by Miss Ruth Mettinger of the American Red Cross. The next morning will be given over to municipal health problems by Dr. G. N. MacDonell, Health Officer of Miami, Dr. J. R. McEachern, Health Officer of Tampa, and Dr. N. A. Upchurch, Health Officer of Jacksonville. Following this two distinguished guests who have not previously participated in these state meetings will be heard, first the Assistant Commissioner of our own State Department of Agriculture and Mr. McManus of the U. S. Food and Drug Administration.

At the close of the morning session there will be a summing up of the salient features of the program by Dr. C. E. Waller, Assistant Surgeon General, U. S. Public Health Service; Dr. J. A. Ferrell of the Rockefeller Foundation, and Dr. E. L. Bishop, President-elect of the American Public Health Association. The afternoon of the third day will be consumed in a discussion of milk problems by the Florida Milk Inspectors' Association which is affiliated with the State Public Health Association. On this occasion Mr. Weems, Director of the State Milk Commission, will give an address on the purpose of the Commission which he represents.

MEETING OF MIDLAND MEDICAL SOCIETY

The annual meeting of the Florida Midland Medical Society was held at the Morrell Memorial Hospital in Lakeland, October 26th. A short business session was held in the morning, followed by the scientific program:

"Is Atabrine a Specific for Florida Malaria"—

Butler H. Sanchez, Plant City.

"The Treatment of Arterial Fibrosis"—W. H. Spiers, Orlando.

"Our Part in the New Deal"—Nathaniel L. Spengler, Tampa.

President's Address—S. A. Clark, Lakeland.

During the afternoon session, the following papers were read and discussed:

"A Few Phases of the Thyroid Problem"—W. D. Sugg, Bradenton.

"What Can We Promise Our Rectal Stricture Patients?"—Jack Halton, Tampa.

"The Use of Phenobarbital in Infancy"—James R. Boulware, Lakeland.

"Fibrositis"—T. M. Rivers, Kissimmee.

At the election of officers, held after the afternoon scientific session, the following officers were chosen for the ensuing year:

President—T. M. Rivers, Kissimmee.

First Vice-President—Robert C. Black, Plant City.

Second Vice-President—W. Terrell Simpson, Winter Haven.

Secretary-Treasurer—James R. Boulware, Lakeland.

STATE NEWS ITEMS

Dr. and Mrs. W. T. Simpson of Winter Haven spent seven weeks during July and August in and about Chicago. Dr. Simpson visited the Mayo Clinic and did some special work in surgery at the Cook County Graduate School of Medicine. Dr. and Mrs. Simpson also attended the Fair.

* * *

Dr. L. W. Martin of Sebring has returned home from a visit to Chicago where he attended the meeting of the American College of Surgeons and the World's Fair.

* * *

Dr. E. T. Sellers of Jacksonville has been appointed by Governor Sholtz as a member of the Duval County Welfare Board. He succeeds J. E. Whipple, whose term has expired.

Dr. Leland H. Dame of Inverness was recently elected president of the local Kiwanis Club.

* * *

Dr. and Mrs. J. C. Nowling of West Palm Beach recently spent some time with their daughter and son-in-law, Dr. and Mrs. John Anderson, in Miami. Dr. Nowling also attended the meeting of the Florida East Coast Medical Association.

* * *

Dr. and Mrs. John A. Simmons of Arcadia left by motor on October 12th for Cleveland, where Dr. Simmons attended the International Medical Assembly. Dr. and Mrs. Simmons attended the Fair in Chicago before returning home.

* * *

The American Association for the Study of Goiter, for the fifth time, offers three hundred dollars (\$300.00) as a first award, and two honorable mentions for the best essays based upon original research work on any phase of goiter presented at their annual meeting in Cleveland, Ohio, June 7th, 8th, and 9th, 1934. It is hoped this will stimulate valuable research work, especially in regard to the basic cause of goiter.

Competing manuscripts must be in English, and submitted to the Corresponding Secretary, J. R. Yung, M. D., 670 Cherry St., Terre Haute, Ind., U. S. A., not later than April 1, 1934. Manuscripts received after this date will be held for the next year or returned at the author's request.

* * *

Dr. and Mrs. C. D. Hoffman of Orlando have returned from a three weeks' visit in Chicago.

* * *

Dr. William D. Lithgow of Miami visited the Century of Progress Exposition in Chicago and the Mayo Clinic in Rochester while on his vacation recently.

* * *

The regular quarterly clinical meeting of the Florida Dermatological Society was held the week-end of October 29th, in Tampa. Dr. J. J. Saxton of Tampa is chairman of the society and Dr. Elmo D. French of Miami, the secretary. Those in attendance were: J. L. Kirby-Smith and Frank Wilson of Jacksonville; Elmo D. French, Rothwell Lefholz and B. L. Litterer of Miami; and C. A. Andrews and J. J. Saxton of Tampa.

Dr. and Mrs. M. A. Lischkoff of Pensacola have returned from a vacation trip spent in Chicago. While in that city, Dr. Lischkoff attended the meeting of the American College of Surgeons.

* * *

Tyree C. Whitehurst, formerly of Tampa, dropped dead in the Federal Penitentiary in Atlanta on September 10th. Whitehurst was sentenced on March 8th for using the mails to defraud. This case was particularly interesting to the medical profession inasmuch as it hinged on the annual registration act. Whitehurst mailed to the State Board of Health an application for a certificate of registration showing that he was properly licensed. The State Board of Medical Examiners had no record of such a license. The case came up several times in court before a verdict of "guilty" could be secured. (See J.F.M.A., Mar., 1933, p. 394.)

* * *

Dr. William H. Watters has returned to Florida after having been located in Boston, Mass. during the summer. He has again opened his Boston-Miami Clinic at Coconut Grove.

* * *

Among St. Petersburg doctors who have this summer visited the World's Fair in Chicago, were W. C. McConnell, J. A. Strickland, Gideon Timberlake and C. A. Williams.

* * *

Dr. E. J. Hall of Miami recently spent ten days in New York.

* * *

Dr. and Mrs. F. W. Foxworthy of Miami recently returned from an extended motor trip which took them through sixteen states. During this trip Dr. Foxworthy visited clinics in important centers as far north of Rochester, Minn., and as far east as New York. He also did considerable work in the investigation of medical insurance disabilities. While in New York, Dr. and Mrs. Foxworthy were guests of Dr. and Mrs. Wm. Chas. Kennedy.

* * *

Dr. R. H. Knowlton of St. Petersburg has returned from a two months' vacation spent in the north. Following a tour of the New England states, he attended clinics in Boston and visited the Fair in Chicago. Dr. Knowlton's trip was saddened by the death of his father while he was visiting him in Acton, Mass.

Dr. Ferdinand Richards of Jacksonville attended the clinical congress of the American College of Surgeons held in Chicago in September.

* * *

Dr. B. L. Whitten of Miami has returned from an extended motor trip through the northeast and middle west.

* * *

Among the Florida doctors who attended the Radiological Congress in Chicago, September 25th to 30th, were: L. W. Cunningham and H. B. McEuen, Jacksonville; Walter A. Weed, Lakeland; F. J. Payton, Miami Beach; J. N. Moore, Ocala; O. O. Feaster, St. Petersburg; Bundy Allen and H. O. Brown, Tampa. This was the first American Congress of Radiology and was a joint meeting of the American Roentgen Ray Society, the American Radium Society, the Radiological Society of North America and the American College of Radiology. There were in attendance about 600 radiologists from the United States, Canada, South America and Central America.

* * *

Dr. W. M. Davis of St. Petersburg has returned from a six weeks' sojourn in his West Virginia mountain home.

* * *

Dr. Robert M. Harris of Miami recently spent some time in North Carolina, Boston and Chicago. While he was away, his offices in the Huntington Building underwent complete remodeling and redecorating.

* * *

Dr. T. B. Echard has returned to St. Petersburg from a two months' vacation spent at his summer home in Pennsylvania.

* * *

Dr. Nelson Pearson, who states that he spent a most pleasant three weeks in North Carolina, has returned to Miami, via New Orleans.

VAN HENRY GWINN

Dr. Van Henry Gwinn of Jacksonville died on July 8, 1933, at the age of 64.

Dr. Gwinn was born in Glennwood, West Virginia, November 11, 1868. He attended the State Normal School of West Virginia and the University of West Virginia. He graduated in medicine from the University of Michigan in 1891. In 1897 he moved to Brooksville, Florida, where he practiced until 1904. From 1904 until

the time of his death, Dr. Gwinn resided in Jacksonville and practiced his profession with the exception of two years, 1917-1919, when he served the State Board of Health as district health officer.

Dr. Gwinn was one of the oldest members of the Duval County Medical Society, having affiliated himself with that organization soon after coming to Jacksonville.

EUGENE ROBERT McMURRAY

Dr. Eugene Robert McMurray was born July 4, 1874, at Morris, Illinois, but grew to manhood at Francisville, Indiana. He received his medical education at Rush Medical College in Chicago, from which he graduated in 1897. Following his graduation, he practiced general medicine at Donaldson, Ia., and at Francisville, Ind. In 1905 Dr. McMurray came to Bartow, Florida, where he practiced for six months, removing in June to Mulberry, where he remained for seven years. In 1912 Dr. McMurray took a special post-graduate course in eye, ear, nose and throat work in Chicago. In September, 1913, he returned to Bartow, where he practiced up until the time of his death.

Dr. McMurray was a member of the Polk County Medical Society, the Florida Medical Association and the American Medical Association. He was also a Mason and a Shriner.

Dr. McMurray is survived by his wife, a daughter, Helen, who is a nurse and was his assistant, and a son, James, who is a senior medical student at Tulane University, New Orleans.

Dr. A. L. Mills of St. Petersburg recently spent six weeks in Philadelphia, where he attended clinics. He was also in attendance at the annual meeting of the Pennsylvania State Medical Association.

* * *

Dr. T. R. Griffin of St. Petersburg recently spent six weeks on his Kentucky farm. Before returning home, he visited the Fair in Chicago.

* * *

Dr. N. M. Marr of St. Petersburg spent some time during the month of October in Cincinnati doing post-graduate work at the Cincinnati General Hospital. He visited the Century of Progress Exposition before his return home.



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Dr. Bascom Palmer has returned to Miami from a leisurely trip through the west where he visited the National parks.

* * *

Dr. P. T. Skaggs of Miami has returned from a three months' vacation spent in Kentucky and West Virginia.

COMPONENT COUNTY SOCIETIES

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The Tri-County Medical Society held its regular monthly meeting at the Jacaranda Hotel, Avon Park, October 10, at 8 p. m. Guests of the meeting were: Drs. Robert G. Nelson, W. C. Blake, C. R. Marney, Robert P. Henderson of Tampa, Dr. C. W. Pease of West Palm Beach and Dr. Faison of Sebring. Dr. Nelson of Tampa read a very instructive paper entitled "Labor in Abnormal Presentations with Special Reference to Transverse Positions." This was discussed by Drs. Marney, Poucher and Simmons. Dr. Poucher read an interesting paper on "Medical Complications of Pregnancy," which was discussed by Drs. Nelson, Marney, Henderson, Highsmith and Weems. Dr. Pease spoke about the increase of malaria in South Florida.

After the scientific program there was considerable discussion concerning the establishment of a fee schedule in regard to work for the Florida Emergency Relief Administration. Dr. Poucher made a motion, seconded by Dr. Weems, that the president appoint a committee to draw up a resolution establishing a fee schedule to apply to work done for the F. E. R. A. The motion was carried and Drs. A. A. Poucher, H. V. Weems, and G. S. McKnight were appointed to act after ascertaining from Dr. Herman Watson if any conclusions had been reached during the recent meeting of the presidents of county societies with officers of the F. E. R. A. in Orlando. The society adjourned to meet in Arcadia in November.

DUVAL COUNTY MEDICAL SOCIETY

The scientific program of the Duval County Medical Society, held Tuesday, November 7th, at 8 p. m., consisted of a symposium on cancer, as follows:

"Cancer as a Public Health Problem"—Gerry R. Holden, chairman of State Committee on Cancer Control.

William D. Jones

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"Prevention and Diagnosis of Cancer"—Stanley Erwin.

"Modern Concept of Cancer Pathology"—Frank Dyrenforth.

The Canti Film, a moving picture showing the behavior of living tissue in vitro and the effect of radium upon cancer cells, was shown by Dr. H. B. McEuen.

Literature and reprints furnished by the American Society for Cancer Control were distributed.

The usual business meeting followed the scientific session.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

Dr. J. T. Bradshaw entertained the Pasco-Hernando-Citrus County Medical Society at his home at San Antonio, Thursday evening, October 12, 1933.

Mrs. Bradshaw served a very fine, full course chicken dinner, which was enjoyed by all present. A vote of thanks was extended to Dr. and Mrs. Bradshaw for this very enjoyable occasion.

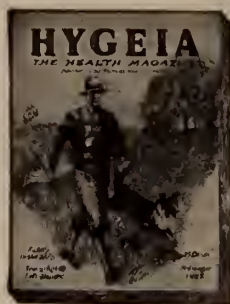
A discussion of the Federal Emergency Relief was entered into by those present in reference to fees for treatment of indigent cases. The matter was deferred until the Florida Medical Association and the Emergency Relief Council reached an adjustment.

Dr. Wm. Rowlett, Tampa, president of the Florida Medical Association, the invited guest, read a very interesting paper on "Cervical Infections." A motion was made and carried that we request the Florida Medical Association to publish Dr. Rowlett's paper in the Journal of the Florida Medical Association.

Dr. W. W. Jones, of Dade City, invited the Society to meet with him in Dade City in November.

ONE DOSE TOXOID?

At the fifth annual meeting of the Florida Public Health Association to be held in St. Petersburg the first week in December, Dr. W. T. Harrison of the U. S. Public Health Service will bring the latest information on the improved methods of protecting children against diphtheria. Dr. Harrison will speak on the new development in the one dose toxoid which seems to be the most promising thing yet developed in diphtheria prevention. Doctors in Florida are cordially invited to attend the meeting.



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DUVAL AUXILIARY

The Auxiliary to the Duval County Medical Society held its annual meeting on the afternoon of October 5th at the Party House in Avondale. Committee reports were heard with Mrs. George E. Beckman presiding.

New officers elected were Mrs. Gordon H. Ira, president; Mrs. A. K. Wilson, vice-president; Mrs. Harold VanSchaick, treasurer; and Mrs. Neil Alford, secretary.

Following the business session bridge was played, and high prize won by Mrs. Luther Hol-loway, with Mrs. Sellers winning a special prize.

Tea was served, with Mrs. Noble D. Upchurch as hostess, and Mrs. Shaler Richardson presiding at the tea table.

A large number of the Auxiliary members were present.

* * *

POLK AUXILIARY

The Polk Auxiliary held a dinner meeting at Hotel Thelma, Lakeland, on October 11. Plans were made for assembling the garments for the baby layettes to be placed in hospitals in the various towns in Polk County.

After other routine business, Mrs. J. G. Lester, accompanied by Mrs. J. D. Griffin sang two lovely solos. After dinner a social hour was enjoyed. Members were present from Lakeland, Lake Wales, Pierce, Fort Meade, Bartow, Brewster and Winter Haven. The next meeting will be held in Fort Meade in December.

* * *

The following quotation is from the pen of Mrs. McGlothlan, past president of the A. M. A. Auxiliary:

"The Golden Rule may not say: Protect chil-dren against communicable diseases; take care of

mothers in child birth; secure pure water; help humanity to adjust itself rather than increase crime, delinquency and dependency; take care of the child limping a little in the race with a handi-cap—but when it says: 'Love your neighbor as yourself', in modern times it means these things and because the medical profession is doing these things and the Auxiliaries are helping to do them. I believe in the Auxiliary."

Clippings from some of the news items from various Auxiliaries show how they are working out this idea of the Golden Rule.

Missouri Auxiliary has a membership of about 800. They featured in counties having Auxil-iaries a tuberculosis essay contest in Junior and Senior high schools with cash prizes to the win-ners. More than two hundred essays were written.

Ten of their county Auxiliaries held Public Relations teas with representatives from other health-minded organizations as guests, and had a speaker approved by the State Medical Associa-tion to address them.

The Colorado chairman of public relations in-stituted a successful essay contest on the subject "Prevention of Disease Through Education."

Articles are often found in Hygeia that might be the basis of an essay to be written by school children.

San Joaquin County (California) Auxiliary had their health laws printed and distributed to various organizations to be used as study ma-terial.

In Texas the Bell County Auxiliary organized a health club among school children and they presented a number of health plays. Outstand-ing among the latter was "The Magic Fluid", which was given on May first in celebration of National Child Health Day.

The Bexar County Auxiliary sponsored the spectacular play on May first "May Day Old and New," in which a cast of 200 children took part.

* * *

This past year's national slogan, "Know your Auxiliary", could well be a continuous slogan. It has had practical results in Alabama in an increase of information, enthusiasm and mem-bership. They report an increase in membership of 90%.

Georgia has twenty-nine auxiliaries, all of which are actively engaged in following some of the work outlined by the National Auxiliary.

Publicity notes have been received from every Auxiliary.

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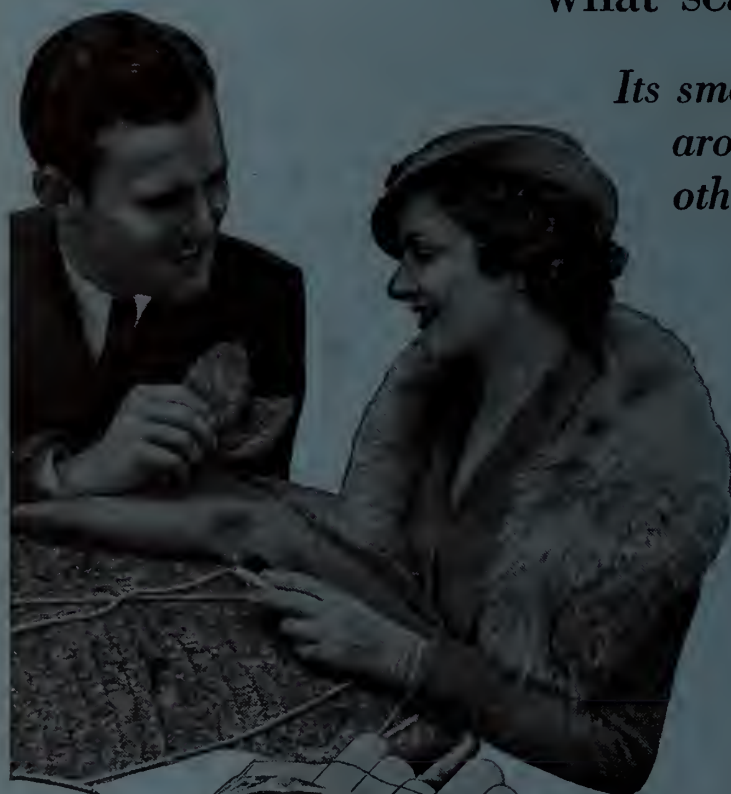


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VOLUME XX
NO. 6

Jacksonville, Florida, December, 1933

Yearly Subscription, \$3.00
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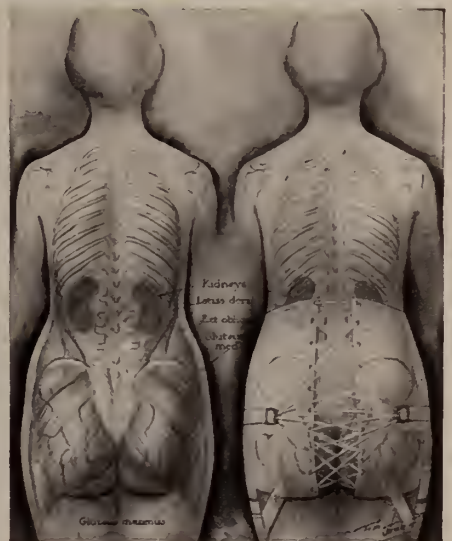
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, December, 1933

Number 6

OBSERVATION OF FIVE HUNDRED FRACTURES*

JOSEPH HALTON, M.D.,
Sarasota.

In a conversation four years ago with my personal friend and our esteemed colleague, Dr. Fred H. Albee of New York, he made this statement: "Men in small communities, and general practitioners especially, should make it a point to write up and report their most interesting clinical data as it adds to the life of the medical societies and also to the general total of scientific knowledge." Following that suggestion I present the following paper:

MY OBSERVATION OF 500 FRACTURES

The general practitioner has usurped the domain of the railroad surgeon in observation and treatment of fractures. There was a time when fractures occurred chiefly in the territory of the railroad surgeon but in this age of machinery traumatic surgery has become a larger field, and the automobile has replaced the locomotive in the realm of fractures.

My objective in giving to you the observations I have made on these 500 fractures is that you may glean some benefit from my experience. We pass this way but once and if in passing we let fall some seed upon fertile ground it will be enough.

These 500 fractures came to me during the years 1923 to 1933, a period of ten years. Of these seventy-five per cent were right-sided fractures, twenty-five per cent were left-sided, 342 were simple fractures, 96 were compound, and three compound comminuted. There were:

- 11 Fractures of the skull,
- 8 Inferior maxillaries,
- 2 Superior maxillaries (right orbit and pterygoid),
- 2 Scapula,
- 22 Clavicle,

- 36 Humerus,
- 30 Radii,
- 20 Ulna,
- 31 Metacarpal,
- 90 Phalanges of the hand,
- 45 Ribs,
- 12 Pelvis,
- (2 Thoracic) 8 bodies,
- 29 Vertebra (27 lumbar) 21 lateral processes,
- 24 Femur,
- 5 Patella,
- 39 Tibia,
- 25 Fibia,
- 6 Astragalus,
- 11 Metatarsal,
- 3 Oscallsis,
- 21 Phalanges of foot,
- 1 Cuboid,
- 1 Cuneiform.

Out of these fractures 166 were displaced. Now why not more displacement? I got them early. Get your fractures set as early as possible; don't wait. In case of transportation use this motto—"Splint them where they lie."

I find a large percentage of fractures that are not out of line and if you get them early, before muscular contraction begins, you will find all that is necessary is to apply the proper splint. In other words, fractured but not displaced. These are the fractures which, if you try to elicit crepitation by manipulation, you are very apt to make the fracture worse.

The idea that many bones are broken by muscular pull is rapidly developing in my mind. It does not always have to be by direct force. I believe a divergent pull by opposing muscles will sometimes cause a fracture. A great many fractures of the lateral processes of the lumbar vertebrae are due to muscular pull.

I have often noticed that men in viewing fractures where the proximal and distal ends are shifted to one side, but not overlapping, want to

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

manipulate the ends and try to bring them into direct line. This results oftentimes in the separation of the impaction with overlapping of the proximal and distal ends of the fracture. It is then a very difficult job to replace the broken parts.

Nature will heal these bones in fairly direct line, throwing down a callus similar in shape to that you see where a plumber wipes a lead joint. In this type fracture I leave it alone for Nature will do a better job by not being disturbed any further. More especially is this the case in young children with fracture of the femur. This fracture occurred in a boy four years old in the year 1925. Final pictures were taken in 1929. This definitely demonstrates Wolff's law as follows: "Bony deformity and the visible prominence caused by callus tend to lessen or entirely disappear in time. This is in accordance with Wolff's law, which states that the internal and external configuration of bone is adapted to the function it performs. The sharp angles round off and new trabeculae form along the lines of stress, but while this improves the appearance at the seat of deformity, it does not restore the normal axes of the joints or remedy the other ill effects of malunion."

There is a fracture at the ankle that is quite frequent. I call it a chip fracture, in which the ligamentous attachment is torn loose and you see it in the x-ray as a slight sliver of bone separated from the tibia or fibula. This is the type often mistaken for a sprained ankle.

PLASTER PARIS

Of all the splints that I have ever seen used I like the plaster paris bandage best. Give me a five-pound can of plaster paris, ten yards of crinoline and a careless nurse, and I will make as fine a splint as you can purchase. Why do I say a careless nurse? Because I want my bandages well impregnated with plaster paris and rolled loosely. Most nurses in preparing plaster paris bandages roll them too tightly. When you put the plaster paris bandage in a bucket don't lay it flat but stand it on end. The water permeates it much better. Seize it by both ends and squeeze so the water will come out from the center and not at the ends. By closing the ends the plaster will not squeeze out so rapidly. I always put a large handful of salt into the bucket of warm water as it makes the plaster set more rapidly. Keep your plaster paris in air-tight cans, away

from dampness and moisture. The outstanding feature of a plaster paris bandage is its likeness to a tailor-made suit, it fits and stays put. A ready-made splint that fits everyone will fit no one. A circular plaster paris splint may be split before it hardens, or you can make them separately, a posterior and anterior, and mold them with a circular gauze bandage.

After I have put a plaster paris splint on, I always have the patient return twenty-four hours later that I may observe the splint to see if everything looks normal and is in good shape.

I look upon every fracture with a certain element of suspicion of syphilis, especially in the negro, and I make a Wassermann test on most of those who show any slow callous formation. I always give tetanus antitoxin in a case of compound fracture.

I never attempt to set a fracture without a gas-oxygen anesthesia, with a whiff of ether introduced if the patient does not relax sufficiently. You must have perfect relaxation, especially is this so in the Colles' fracture.

X-RAYS

Be sure that your central beam is directly over the site of the fracture, for you know the danger of distortion if it is not correct.

Include all the bone that is fractured. Some must be stereoscopic. The hand, wrist, elbow, humerus, ulna, radius, femur, tibia, fibula, ankle, dorsal spine, lumbar spine, knee and foot should have two views, anterior posterior, and lateral. If the tibia is fractured look out for one in the fibula. The shoulder, cervical spine, elbow, pelvis and knee should be stereoscopic. Chest technique for ribs. Oscallsis has a special technique. Facial bones should have three views: forehead on plate, nose-chin position, and lateral; also a stereoscopic in a good position. Lower jaw is stereoscopic.

Don't be afraid to take an x-ray after the case is set up to see your results.

The situation of a doctor in a medico-legal case where an x-ray has not been made is very uncomfortable. I believe whenever an x-ray is available, and is not used in fractures, the attendant is guilty of malpractice.

TREATMENT

Stop your patient's suffering with a hypodermic of morphine, and make the dose large enough. It relaxes the muscles, relieves the

patient of pain, and reduces the doctor's mental hazard.

The treatment of fractures is a matter of choice and adaptability of the operator. What will work with one man will fail with another. There is no doubt in my mind that skeletal traction is by far the best. I am dissatisfied with skin traction, but if you do use it add the weights slowly and apply a bandage over the adhesive to hold it close to the skin. Do not shave the hair. There is the new adhesive plaster, elastoplast, which you can use in place of the bandage after traction is applied.

Never pull the fractured ends too far apart. You can get a non-union. Don't be afraid to take an x-ray after you have set the fracture. There is one type of splint I am not satisfied with, used for the clavicle, the fracture I dread most.

Be sure and take comparative measurements of the injured and uninjured extremities. If you are not satisfied with the reduction two or three days later, don't be afraid to do it all over again. Watch the circulation carefully.

Fracture of the neck of the femur: Do not cause displacement by careless manipulation. Avoid all unnecessary movement until you get an x-ray.

Start early massage, active and passive, to overcome decalcification resulting in atrophy from disuse. It will also keep the circulation normal and stay muscular atrophy.

SUNLIGHT TREATMENT

For the past few years I have been growing more and more enthusiastic over the possibilities of using sunlight treatment in the healing of fractures. This is especially seen where you have an amputation of part of the toes or fingers. Very seldom do we disarticulate a phalanx or metatarsal without first giving the sunlight treatment a trial. I have the patient come in daily for observation and then he is placed on the roof of the hospital from one to three hours under the direct exposure of the sunlight. This treatment seems to cause a drying of the injured phalanx or metatarsal, and a rapid construction of granulation tissue follows, often with startling results. I use a thick coat of vaseline to protect the granulations.

SUMMARY

Always use gentleness and care and the simplest method in examination for diagnosis of fracture; no unnecessary handling. Any definite, localized tenderness over an injury is usually satisfactory evidence of fracture. Don't try for crepitus. You may displace a fracture that is well in line. Don't be deceived by absence of deformity or disability. Look for more than one fracture. Get an x-ray. Get early motion, especially around joints. In traction, don't put all the weights on at once. Slowly tire the muscles. Bring the controlled fragment in line with the fragment that cannot be controlled. Watch for swelling for two to four days after the fracture is set. Don't wait for swelling to go down before setting a fracture. Examine for nerve injury. Watch the circulation. Diagnosis is first; the splint is second. Use plenty of padding. Look upon every injury as a fracture until proved incorrect. All compound fractures should receive tetanus antitoxin, and plenty of tincture of iodine. I "puddle" the laceration with iodine. Use all your surgical sense in handling a compound fracture. Splints made to fit everybody fit nobody. That is the reason I like plaster paris. Continued pain twenty-four hours after setting usually indicates an incomplete reduction or poorly applied splints. Get early motion. Last, but not least, don't let the x-ray do all the thinking for you.

There are two or three cases of interest which I wish to show you:

DEMONSTRATION

Mrs. W.'s X-rays.

There is an interesting thing about this case from the medico-legal standpoint. This woman had reached her full time of pregnancy and was expecting to be delivered at any time when a railroad accident happened and her pelvis was fractured, with a marked separation of the symphysis pubes. The head of the child is seen floating in the pelvic brim. This case was characterized by rapid labor; the patient being delivered one hour after the accident, having only one pain. It is interesting to note that when the infant was born it was a blue baby, dying forty-eight hours later. Post-mortem showed a patent foramen ovale. The railroad accident was not responsible for the death of the child. This shows the value of x-ray.

(For Discussions see page 246)

FRACTURES AT THE ANKLE AND WRIST*

W. M. SHAW, A.B., M.D.,
Jacksonville.

Anatomical reduction of fragments in a fracture is a worthy ambition but our appreciation of functional results often is slighted. We frequently fail to interpret x-ray negatives with the proper appreciation of functional outlook. The interpretation too often focuses undue attention to the reduction of fragments, rather than the correct position for the functioning of adjacent joints.

A detailed discussion of the treatment of fractures is not intended in this paper. However, since the roentgenologist is, or should be, a regular medical consultant, certain principles of treatment ought to be emphasized. The majority of these fractures are seen and treated by physicians doing general practice and the roentgenologist can be of great assistance to these men in offering helpful suggestions as to treatment, if these suggestions are judiciously given. As Dr. Archer has recently stated in an article appearing in the *Southern Medical Journal*,¹ "The radiologist sees many more fractures than any one man who is referring him work, and consequently should have a better knowledge of both pathology and bone repair than any medical man except the orthopedic surgeon."

I wish to show you that less attention need be given to the anatomical position of fragments if the adjacent joint surfaces are in a correct relation and the established lines of weight bearing force are satisfactory.

FRACTURES AT THE ANKLE

The functional result of a fracture at the ankle joint depends upon the proper reduction of the astragalus so that the line of weight bearing force which passes down through the center of the shaft of the tibia also passes through the center of the astragalus. Always remember that the functional result is the one the patient is interested in.

The antero-posterior negative gives us the information regarding the relation between the lower end of the tibia to the astragalus. A vertical line on the antero-posterior negative drawn through the center of the tibia extends downward through the center of the astragalus, if the ankle joint is in normal position. (See Fig. 1.)

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.



FIG. 1. Normal Ankle. Showing that a line drawn through center of tibial shaft will pass through center of astragalus.

For us to determine the normal or abnormal relationship of the articulation between the tibia and astragalus we must realize that the head of the astragalus is firmly mortised or held between the lower end of the fibula and the internal malleolus of the tibia. This places it directly beneath the broad articulating and weight bearing surface of the lower end of the tibia. Dr. Skinner has estimated: "The shadow of a normal ankle upon a film shows there is approximately $\frac{1}{8}$ -inch space, in the adult, between the astragalus and the internal malleolus."² This space increases with the slightest fracture displacement of the external malleolus.

The external malleolus or lower end of the fibula only serves to keep the astragalus in place, thus forming the external border of the ankle mortise. It bears no weight. The strength of the ankle joint depends upon how well the lower end of the fibula performs this mortising or bracing function. A large majority of ankle sprains and fractures are in reality fractures of the external malleolus. If the fragments of the external malleolus are in relatively poor position but the astragalus is in good alignment beneath the tibia it is unnecessary to further attempt reduction of the fragments. You can assure your patient of a good functional result.

The best way to reduce these fractures of the external malleolus or lower end of the fibula is internal rotation of the foot which promotes a proper reducing of the astragalus. In other

words, turn the toes in. As Dr. Skinner has so aptly expressed it, "reduce the astragalus and avoid painful ankles."²

FRACTURES AT THE WRIST

For a proper conception of the problems presented in fractures at the wrist joint it is necessary that we get a clear idea of the normal. The functional result of the wrist joint depends entirely upon the proper adaptation of the articulating head of the radius to the carpal bones. In the lateral view of the wrist the plane of the articulating surface of the normal radius with the carpus is tilted so that the dorsal edge of the radial head is always slightly distal to the palmar edge. It is the tilting backward toward the dorsal surface of the wrist of the radial head that interferes with the function of the wrist after the fracture is healed. This is the key to the situation. (See Fig. 2.)

Keeping these normal planes in mind we find that the styloid process, not just the tip of the radius, falls constantly distal to the transverse line which touches the tip of the ulnar styloid, which line is drawn at a right angle to the long axis of the radius. The functional outlook or

prognosis of fractures of the head of the radius depends upon the reduction of the head of the radius to this position.

If the styloid process of the radius is proximal to the transverse line at the level of the ulnar styloid the radius then is not properly reduced and if left in this position the result will be poor as to the future function of the wrist.

Fractures of the carpal bones are not rare. Dr. Scudder states that fractures of the scaphoid and semilunar occur in a ratio of 1 to 10 as compared to Colles' fractures.³ More mistakes in diagnosis are made in not recognizing fractures of the carpal bones than any other injury at the wrist. Two additional views of the wrist, besides the routine antero-posterior and lateral views, are very helpful in revealing these carpal fractures. These are, (1) semi-pronation which shows the trapezium, trapezoid and scaphoid; (2) semi-supination which shows the pisiform and cuneiform.⁴

Treatment of fractures of the carpal bones must be continued much longer than for fractures of the radius and ulna. Usually it takes from eight to ten weeks for repair because of the slow union which results from the poor blood supply. Early and complete immobilization is of utmost importance.

Dislocations of the carpal bones occur frequently with carpal fractures. The semilunar bone is the most commonly dislocated and is best shown in the lateral view. Very early reduction is necessary before the former site of the small bone fills with granulations, etc. It has been my observation that open surgical operation has been the ultimate, and best, treatment for these small bone injuries, often with the removal of a fragment or the complete bone.

Epiphyseal injuries during youth are not uncommon. The epiphyseal line is one of the weakest points of long bones. Some of these injuries are very difficult or even impossible to recognize on x-ray films. If an epiphyseal separation has been perfectly reduced without a crack or splintering of the bone, this epiphyseal injury cannot be diagnosed by the x-ray. Here the patient should be treated from the clinical observation of the affected part. Severe epiphyseal injury, such as might result from a crushing force, sometimes causes a cessation of further growth in the length of the bone. Fortunately, this is a rare complication.

In concluding these brief remarks about frac-

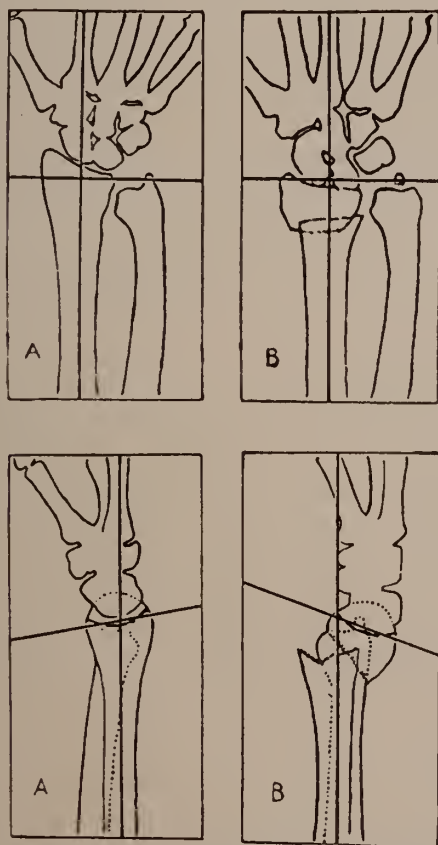


FIG. 2. Wrist Joint. (a) Normal wrist. (b) Fracture at wrist. Position of fragments poor.

tures occurring at the two most frequently injured parts of the body, let us all remember that Mother Nature is wonderfully tolerant of bone fragments. She demands, however, that we maintain the adjacent joint surfaces in their proper relation to the weight bearing line of the extremity.

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DISCUSSION

(Dr. Halton's and Dr. Shaw's Articles)

Dr. Leland Carlton, Tampa:

The study of fractures is of the greatest interest to every man in the practice of medicine. It matters not whether he is a general practitioner, a general surgeon, an orthopedic surgeon, an eye specialist, a nose and throat specialist, internist or a neurologist. Fractures are not like some of the other conditions or diseases. There are certain diseases which have an immunity or produce an immunity to resultant diseases. Fractures do not. We come into this world predisposed to fractures and as time goes on this predisposition may be lessened, then when we reach old age it is increased again. We come in with this predisposition to fractures and we go out the same way.

In regard to treatment of fractures: There was once a time when we considered the best method of treating fractures was to put the patient at rest for a while until all the swelling subsided. But now it is my opinion that the quicker fractures are treated the less deformity develops, the less pain and discomfort the patient has, and the better results obtain. An early immobilization causes more comfort in the treatment of fractures than any other one thing. Sometimes in the treatment of fractures following the examination and x-ray, I think the general practitioner may be a little too zealous to get what he terms "anatomical results", anxious to show results to the patient. And the patient as well as the man who has not exercised care in the reading of these x-rays, if he thinks the bones are not in perfect apposition anatomically, is dissatisfied. Very often if you can talk him into

leaving the injured member in the position it is you will get a perfect functional result, and perhaps an anatomical result as well.

As Dr. Shaw brought out in his paper, the important factor in treating fractures near joints is retaining a normal weight bearing line or joint axis.

With reference to anesthetics: There are many cases which can be reduced without any anesthetic at all. The reduction is instantaneous, the pain after reduction is no more than before and the discomfort from the anesthetic is unnecessary. If an anesthetic is necessary, the anesthetic I like is local. The muscle relaxation from a local anesthetic is as good as from other forms of anesthetics. If muscle relaxation is wanted gas oxygen is not the anesthetic of choice, in my opinion.

With reference to syphilis as being one of the etiological factors in the non-union of fractures: Dr. Henderson, in making an analysis of cases of syphilitic and non-syphilitic patients found that there was no greater percentage of non-union in fractures of syphilitics than there was in people who were not syphilitic. That is my opinion also.

Open fractures: As a prophylactic treatment of compound fractures, Dr. Halton believes we should give tetanus. I do more than that. We have a good many cases of fractures from automobile accidents in which the debris, dirt and filth injected into these wounds are prone to develop a gas bacillus infection. It has been my practice during the past few years to combine with tetanus antitoxin in all compound fractures, gas bacillus antitoxin, which combination is obtainable.

Sunshine is better than moonshine in the treatment of fractures in that it adds to the general health repair of the individual. I think sunshine is good in almost any disease except diseases which are caused by too much sunshine.

As I mentioned a while ago, anatomical reductions are what we all like but functional results are what we are striving for. That is the thing I would like to place the most emphasis on, especially with reference to fractures close to joints. Joint axis and weight-bearing line are all important factors in these cases. If you don't get a normal weight-bearing line you are going to develop not only a continuing painful joint but, as Dr. Shaw brought out, you will get swelling and limitation of function. Fractures in the

proximity of a joint should be as nearly as possible anatomically reduced. If these can be reduced by the closed method, all good and well. But, for the future result in that joint, if these fractures in the proximity of a joint cannot be reduced satisfactorily by the closed method to where you have a normal weight-bearing line, I think the method of choice is open reduction.

Dr. O. O. Feaster, St. Petersburg:

The essayists have left very little for me to say.

There is one point, however, with regard to x-ray diagnosis that I would like to make. Dr. Carlton has brought out the fact that the blood supply to the carpal bones is poor. It is particularly so after an injury. As a result of this there is often a degree of deformity some days after a fracture that is not present immediately. In fact, we sometimes give a negative x-ray report on a carpal bone at the time of injury then, having occasion to make a subsequent study because of persistent disability, find definite deformity.

One sees the same thing in injuries to vertebral bodies. Every spine injury with negative x-ray report should again have a lateral film after ten days or two weeks if disability or discomfort persists. With surprising frequency a "wedging" will be found after the period of pressure or weight-bearing where absolutely no abnormality could be detected before.

The fact that these cancellous bone structures, carpals and bodies of vertebrae, require a much greater time for complete repair cannot be too greatly emphasized.

Dr. F. K. Herpel, West Palm Beach:

I feel that the discussion on these papers should not be confined to roentgenologists; nevertheless, a roentgenologist cannot pass up an opportunity to comment on such presentations as Drs. Halton and Shaw have given us. The physician doing general practice has just as much right to report his results in fracture cases as the orthopedist, even though he may not meet the same high level as the highly trained orthopedist. The responsibility on the part of the general physician or surgeon handling fracture cases is the same as the orthopedist.

The importance of early reduction cannot be disputed. We still see many patients with fracture treated with plaster casts. We do not have to wait for days for reduction of swelling, then attempt reduction. This procedure is a mistake.

Cases are more frequently being encountered with complicating skin trauma and injuries to skin and underlying soft tissues which cannot well be treated by application of plaster casts.

Many fractures in the region of the wrist and about the ankle can easily be reduced within the first few minutes after injury without any anesthetic. Later a local anesthetic will permit satisfactory reduction without pain in many cases.

May I call attention to certain fractures not previously mentioned, namely, those of the distal part of the radial shaft where there is overriding of fragments and dorsal displacement of the distal fragment, with separation.

These cases cannot be reduced, with or without fluoroscopic control. Open reduction on these cases will in almost every instance reveal muscle, tendon or fascia between the ends of the fragments, preventing reduction.

We all agree on the importance of correct relationships between the internal and external malleolar processes, and between the radial and ulnar styloid processes. Roentgenologists all recognize that failure to restore these relationships will result in a painful, disabled wrist in most instances. In persons of upper middle age, and in the aged, fractures about the wrist should be corrected if possible, and a roentgenologist may incur the antagonism of the surgeon if he attempts to stress the importance of such reduction. We, as roentgenologists, see many more of these painful wrists than the general practitioner who originally takes care of them. As a matter of fact, the man who so takes care of them does not see them later. The patients go to see someone else.

Nature is a great healer, and what most of the speakers have said about the lack of importance of absolute restoration of anatomical position is perfectly true. The so-called "wiping process" which Dr. Halton described is certainly very evident to those of us who see these cases years after the original injury.

The value of the initial examination before reduction of fractures and fracture-dislocations is particularly apparent in cases of epiphyseal separation. I saw one case during the past week in which restoration was perfect, and in which the film after reduction would have been difficult to diagnose as a separation.

Your treatment of fracture will be materially influenced in those cases where the fracture is a pathological one due to bone disease or bone tumor.

As to the causes of non-union, I agree with the remarks of Dr. Halton. Very often a cast will be put on securely at the time of injury and allowed to remain on for five or six weeks. During the first week or two in bed the patient loses weight rapidly. In cases of leg fracture particularly, the result will sometimes be a non-union, where if the original cast had been replaced earlier non-union might have been prevented.

Dr. Charles B. Mabry, Jacksonville:

I want to express my appreciation of the papers that have been so ably handled.

Dr. Lorenz Böhler, of Vienna, stresses three points and these apply to practically all fractures. First, he says that we must bring the axis of the distal fragment into the axis of the proximal fragment. That holds true in every fracture. Second, reduce the fracture by traction and counter traction. Third, maintain the second position in fixation. He uses non-padded plaster casts which are not so common in this country. Of course, the extremity must be watched for swelling and the cast split when necessary.

I agree that all fractures should be reduced immediately. The reason for this is that there is much pressure destruction of the soft tissues surrounding the bone. When there is overlapping there is almost double the diameter of the bone. The sharp ends of the bone compress the blood vessels, lymphatics and muscular tissue there and interfere with the circulation which has a great deal to do with the healing of your fracture. All structures should be put in their anatomical position as soon as possible therefore immediate reduction should be done. That brings the normal alignment of your blood vessels, lymphatics and the soft tissue into being.

In fractures of the wrist I think it is very important to have, as Dr. Carlton says, the styloid of your radius distal to the styloid of the ulna. I also think in wrist reductions, before we ever quit, we should be able to flex the wrist to a right angle. If you can flex the wrist to a right angle, you are very likely to have a good reduction.

About ankles: Dr. Lorenz Böhler says that by flexing the knee in a right angle you can lengthen the heel cord about 6 cm. Fractured ankles must be completely reduced to anatomical alignment. One-half cm. poor alignment can and will cause a permanently painful ankle. Ankles must be correctly reduced. I do not think this can be

stressed too much. A fractured ankle is a rather complicated affair, but by bending the knee to a right angle and then by manipulation of the ankle and application of cast you are very apt to have a good result, if done early.

Dr. John R. Chappell, Orlando:

Just a few words regarding anesthetics in fractures: To my mind the judicious use of anesthetics is an important factor in the reduction of fractures.

Dr. Carlton mentioned local anesthetics, also Dr. Herpel. Since last fall I have been using a basal anesthetic almost routinely, including a few cases of fracture, too few to judge from. However, from the standpoint of convenience, it is certainly the ideal anesthetic for fractures. It is given very easily and acts admirably in overcoming muscular spasm particularly in children. Give 60 mm. per kilogram of body weight. It is easily administered and acts well. Frequently the child is asleep before the unit is completely given. Surgical patients should have a larger dose. Nothing is more heartrending to a parent than to see a child put to sleep from gas oxygen or ether. Avertin produces a natural sleep. No nausea. It is certainly the ideal type of anesthetic for fractures in that it can be used in and about the x-ray room safely.

Dr. F. A. Vogt, Miami:

I have enjoyed the papers of Dr. Halton and Dr. Shaw very much. Also the discussions. I have not a great deal to add to what has already been said, but I feel that a few things should be more thoroughly emphasized.

I agree with Dr. Halton that plaster of paris is one of the best materials that we have to use for our splints. That is, we can make the splint fit the patient and do not have to make the patient fit the splint.

In regard to carpal fractures, I would like to say this: If there is not a great deal of displacement, thorough immobilization for a longer period than we have usually been employing will allow that group to heal. The blood supply to the carpal bones, as you know, is limited. In other words, it is similar to a fracture of the neck of the femur. In these particular cases I feel that thorough immobilization over longer periods of time will very often cause absolute healing. Even in those fractures of the carpal bones that have been neglected for several months,

where your x-ray shows absorption of quite a bit of the bone, if you thoroughly immobilize that wrist joint, leaving the fingers so they can do a moderate amount of work, in anywhere from four to eight months you will see from an x-ray standpoint they are thoroughly healed.

In regard to fractures of the lower end of the radius, I agree with Dr. Shaw that his method of prognosis is the nicest method of determining what is going to happen to these patients' wrists later on. There is one thing I would like to ask Dr. Shaw in these cases, especially in regard to elderly or middle-aged people where you get an impaction and also much displacement. In several cases I have had I have been unable to absolutely lengthen the radius. With such an impaction of the lower end of the radius I think it is almost impossible to lengthen it to where the lower end of the radius is in its normal position. When that happens I do not know what the prognosis would be.

For the past three years I have been using Böhler's method of splinting the bones of the forearm and carpus, using a non-padded plaster splint, a volar and dorsal splint. This leaves the fingers free for movement. After the fracture has been reduced by this method, in cases even where the anatomical reduction is not perfect, you can secure a fair degree of function. After three or four days remove the sling and allow the patient to do a certain amount of work. I find that this applies even to these elderly patients. You may not get a perfect anatomical result but you will get a good functional result.

I believe what we should strive to do in our treatment of fractures is cut out so much manipulation. Instead of a perfect anatomical reduction, we should think of the later functional results we are going to get. In lots of cases I really feel that we cripple our patients by our treatment. That is, we immobilize them too long. For fracture of the fingers or forearm we keep them in plaster casts for months. They are not moved; then when we take them out of the plaster splint, although your fracture is already healed, your muscles are contracted, the joint is stiff and it takes months and sometimes years before we can get the proper result. I feel that we should begin to work out some method of mobilization of certain parts of the limb that has been fractured. Dr. Morton-Smart of Edinburgh has recently brought forward a method of graduated muscular contractions. I think a great deal of

that type of work. After the fracture is reduced the motion of the neuro-muscular apparatus is put into working order so that after the splint is removed we are better able to get a functional result.

Dr. J. G. DuPuis, Miami:

I am very glad to hear these excellent papers and discussions and just wish to say a word.

I can remember the days when we had no x-rays; of course, they are good and it would be hard to get along without them, and all that has been said is excellent—but to illustrate with a question: What might happen if we depended entirely upon the x-ray and suddenly the electric current be cut off?

Reciting one little incident that happened before I reached medical school, being a youth of about sixteen years of age, when I observed a compound comminuted and mangled fracture of a goose's foot, which impelled me to do something for that helpless fowl. I bandaged it up the best I could with wooden splints and string and watched it with much anxiety to see what would become of this goose. When the splints were taken off the goose's repair was excellent. I feel that if nature did that wonderful repair to a compound comminuted fracture of that fowl, it would be ready always to help the human family. That incident is one of the inspirations that suggested the studying of medicine to me. I thought then that would be the last goose I would ever have for a patient, but it has been different!

I agree with Dr. Halton's and Dr. Shaw's papers relative to the value of the x-ray, but the point I would like to emphasize is this: It is always a good and safe rule to look at the patient's opposite normal hand, normal arm, normal carpal and normal anything, and compare it thoroughly with the injured member both before and after you have made your x-ray, and align scrupulously the injured with the normal part of the body—and then ask the x-ray to confirm your own diagnosis.

Dr. Joseph Halton, Sarasota (concluding):

I am very glad to have read a paper which received so many discussions, and I appreciate them.

Dr. W. M. Shaw, Jacksonville (concluding):

I have no further remarks to make, other than to thank the gentlemen for their discussions.

THE CIVIL LIABILITY OF THE PHYSICIAN TO THE PATIENT*

C. D. TOWERS, LL.B.,

Jacksonville.

In order to thoroughly understand the liability and duty which the law places upon a physician, it is first necessary to know something of the character of the relationship between the physician, or surgeon, and the patient. The words "physician" and "surgeon" are used interchangeably because, when passing upon the question of legal liability, the law makes no distinction in these terms. The relationship between the physician and the patient is based upon the theory that the physician is trained and skilled in those subjects in which the ordinary layman is greatly interested but about which he knows very little, namely, the subject of his health and the health of his loved ones. Generally—or, at least, theoretically—the ordinary patient follows unquestioningly the advice of his physician. The relation between the physician and the patient is one of trust and confidence. Because of these facts, the law tries to protect the layman when he enters into this relationship.

Although the relationship of physician and patient is usually based on contract, nevertheless, the existence of a contract is not a prerequisite to the relationship. Notwithstanding the fact that the Courts, in some cases, use language sufficiently broad to convey the impression that a contract is necessary to the establishment of the relationship, no case involving malpractice has been found in which the patient has been denied the right to recover because of the non-existence of a contract with the physician. The existence of the relationship is a question of fact and not of law and the obligations of the physician result, not from the contract, but from the relationship. Very often the relation is purely a consensual one, that is, one based on the consent of the physician to undertake the treatment of the patient, and the consent of the patient to be treated by the physician. When a physician undertakes the treatment of a patient, he assumes the resulting responsibility and liability, even though the services were performed gratuitously and even though the services may have been for the benefit of a third person, because the patient may always refuse to accept the services of the physician and, when he does accept them, the relationship is

established and the physician becomes liable to the patient for the treatment rendered. The situation is not altered because of the fact that the patient has no ability to make a legal contract—for example, because of the patient's infancy. Notwithstanding his legal disability, an infant, or person under twenty-one years of age, may engage a physician and the latter must conduct himself just as if he were acting under a binding contract.

In order for the relationship of physician and patient to be created, there must exist the assent of the patient and a physician is liable for battery if he operates on a patient without first obtaining the latter's consent, unless, of course, the operation was performed in an emergency. It has been held, however, that the rule of liability to a patient for operating without the latter's consent is subject to the qualification that a patient, when he agrees to accept the treatment from a physician, gives to the latter implied authority to perform all acts and operations reasonably necessary in the treatment of the case.

The welfare of the State demands that physicians, or surgeons, be careful as well as capable. In order to escape the danger of civil liability to a patient, a physician must possess that reasonable degree of learning and skill possessed by others of his profession—in other words, a physician is bound to use such ordinary care, skill and diligence as physicians, or surgeons, in similar neighborhoods in the same line of practice, ordinarily have, or exercise, in like cases. There is, however, one exception to this general rule, namely, in the case where a physician is appointed by lawful authority to examine a person for insanity. In such an instance the physician is liable only for acts done in bad faith and is not held to that high degree of care that he would ordinarily owe to a patient. The physician is equally responsible whether the patient's injuries result from want of care or want of skill on the part of the practitioner. However, the law does not require that the physician use the highest degree of care and skill attainable, or known to the profession, but simply that degree of care, skill and knowledge ordinarily possessed and used by practitioners under similar circumstances. For example, it is not necessary for a physician in a town the size of Folkston, Georgia, or Callahan, Florida, to possess the high degree of care and skill that is possessed by physicians in a city the size of Jacksonville. The reasons for this dis-

*Read before the Staff of Riverside Hospital, June, 1933.

tion are obvious. A physician in a rural community does not have the same opportunity of attending large numbers of patients in up-to-date hospitals as do physicians in large cities and, therefore, cannot be expected to possess that degree of skill and experience that is ordinarily possessed by physicians residing in thickly populated centers. It has been held that the skill and care required of a physician, provided he uses his best judgment, is not increased by the refusal of the latter to accept assistance in his diagnosis of a case, or his refusal to call in a consulting physician.

In determining civil liability, a physician's treatment is tested by the general rules and principles of the particular school of medicine which he follows and not by those of other schools. A physician who professes to follow one system, or school, of medicine, cannot be expected to practice any other and, if he performs the treatment with ordinary care and skill, in accordance with the principles of his school, he is not liable for unsuccessful results. For example, a physician who practices according to the rules of the homeopathic school, cannot be judged by principles followed by physicians who belong to the allopathic school. The Courts have gone so far as to hold that a Christian Science healer, in attending a patient who knowingly sought such treatment, is required to use only that degree of care and skill employed by the ordinary Christian Scientist in practicing the art of healing. However, the rule that a physician's skill and care are tested by the principles of his school, is subject to the qualification that the school must be a recognized school of good standing. In order to be entitled to recognition under this rule, the school must have rules and principles of practice for the guidance of all its members as respects diagnosis and remedies which each member is supposed to observe in any given case.

A physician's treatment is measured by present day standards and not by those that existed in the past. For example, a physician would, today, probably be held to be guilty of malpractice if, under ordinary circumstances, he attempted to set a broken bone without the aid of an x-ray, while a number of years ago such would not have been the case. For instance, about eight or ten years ago, I defended a malpractice case brought against a Jacksonville physician wherein the plaintiff claimed that the physician was negligent because he had attempted to set a broken knee

without the aid of an x-ray. It developed that one of the plaintiff's ligaments had become interposed between the broken bones and, as a result, the patient was permanently disabled. The physician's services were rendered about 1912 or 1913 when the patient was about twelve years old, although the suit was not brought for eight or ten years later, after the patient became of age. I conferred with a number of doctors in this city and was advised that x-rays were not in such common use during the years 1912 and 1913 that a doctor who failed to use one could be said to be guilty of carelessness. Obviously, had the physician been judged by the standard of care and skill existing at the time the suit was instituted, he could easily have been found to be guilty of malpractice for his failure to employ the x-ray. For instance, it has been held that unreasonable delay in taking an x-ray picture which would have enabled the physician to treat to better advantage an injured elbow, was negligence on the part of the physician.

However, while it is the duty of the physician to keep up with the advancement made by his profession, the physician is not permitted to try experiments on his regular patients. He should conform to the mode of practice established by the rules of the school to which he belongs, for the treatment of a given case, and, if he experiments with some other method, he does so at his peril, and is liable to the patient for the resulting injury. If a physician follows the established and approved practice, and is not guilty of gross negligence, he is not liable for injuries caused by the treatment. However, the use of a method, known and approved by the profession, although not generally used, is an exercise of proper care. A physician may employ new methods if they are approved. This qualification allows the profession to make progress after the experimental stage in the development of a new method is passed. But it has been held that the physician is not liable if he fails to use the most approved method of treatment if the injury or disease is such that the patient is unable to stand same.

A physician who professes to be a specialist, or, that is, one who has special knowledge and skill in the treatment of a particular organ, disease, or type of injury, is required to use that degree of skill and care ordinarily possessed by physicians who devote special attention and study to such organ, disease or injury. His duty to his patient cannot be measured by the average

degree of skill of general practitioners, and the latter have been held not to be liable for making an incorrect diagnosis of a very rare disease which can only be detected by a skilled expert.

It is also the physician's duty to make a properly skillful and careful diagnosis of the patient's trouble and, if he fails to use the proper degree of care or skill in making the diagnosis, he is liable to the patient for the damages thus caused, just as much as he is liable for the application of improper treatment. It has been held that, if by the use of reasonable care and skill, the physician should have discovered that an ailment is incurable, or will not yield to the usual treatment, and that the patient will not be benefited thereby, and fails to make such discovery and advise the patient thereof, he is guilty of negligence.

One of the most common causes of malpractice suits results from cases where the surgeon, or his assistant, has closed an incision without removing all the sponges from the wound. The Courts have generally held that this is clearly negligent, and the surgeon has been held responsible regardless of whether he, or the attending nurse, failed to remove the sponges. It has been held that, merely counting, or accounting for, all the sponges is not sufficient to relieve the physician from liability. The Courts, in holding persons responsible in such cases, base their decisions on the ground that removing sponges is part of the surgeon's duty and he cannot properly delegate same to some other person. If, however, the patient's injuries are the result of negligent hospital attention which occurs subsequent to the physician's attendance of the patient and, if the physician has no control over the hospital, the Courts have held that the physician is not liable for such negligent hospital attention. It seems that, if the person, or attendant, causing the damage was, at the time of his act, in the discharge of the surgeon's duties, then the latter is responsible for the damage but, if the surgeon was under no duty to the patient at the time the damage was caused, he could not be held liable therefor. Therefore, it must be decided whether the hospital attendant was discharging his duty at the time of the injury or that of the physician or surgeon.

Generally, hospitals, except those operated solely for charitable purposes, are liable for the negligence of physicians or nurses employed by them, even though the nurse may be acting under the general directions of a physician employed

by the patient. The Courts hold that hospitals operated solely for charitable purposes are not responsible for the negligence or malpractice of their physicians or attendants. It has been held to the same effect even in cases where the patient makes some payment towards the cost of board, such payment being regarded merely as a contribution to assist in maintaining the charity.

As a general rule, a person is liable for negligence even though he acted according to his best judgment. The required standard of careful conduct is not the opinion of the individual but is the conduct of an ordinarily prudent man under the same circumstances. An exception to this general principle is presented when a matter depends entirely on theory and judgment, as, for example, when a physician is called upon to form an opinion in reference to the ailment of his patient. In such case, if a physician uses care, skill and knowledge, he is not responsible for damages resulting from a bona fide error of judgment. The law requires a physician to use skill and careful study and consideration in treating a case, but when the decision depends upon an exercise of judgment, the law further requires only that the judgment be bona fide and so it has been settled by the cases that a physician is not an insurer of the infallibility of his judgment. However, the judgment must be based on the physician's skill, knowledge and care and an error of judgment may be so gross as to be inconsistent with the use of that degree of skill and care that it is the duty of every physician and surgeon to bring to the treatment of a case.

In the absence of any special contract to cure, a physician, when he undertakes a case, does not guarantee a cure nor is any promise to effect a cure or even a partial healing to be implied. No presumption of want of proper care, skill and diligence is raised because the treatment by the physician resulted unsuccessfully.

If a physician operates on a patient without the consent of the latter, or some authorized person, a technical battery is committed. For instance, the Court has held that where a patient only consented to an operation on her right ear but, while under the influence of the anesthetic, was found to be suffering from more serious affliction of the left ear, and the surgeon operated on the latter ear, a trespass was committed for which the patient could recover for the damage suffered. It has also been held that a physician was liable for removing a bone from a patient's foot not-

withstanding the fact that he had been directed by the patient, prior to the operation, not to remove any bone or part thereof. There is an exception to the rule that a physician is liable if he operates without the consent of the patient, namely, if the operation is performed in an emergency exists, the surgeon should secure not ample, where a patient consented to an operation and unexpected conditions developed during the course of the operation, or where some immediate action is found necessary for the preservation of the life or health of the patient and it is impracticable to obtain the consent of the patient or anyone to speak for him. Surgeons usually protect themselves from liability by having patients execute agreements expressly authorizing the surgeon to perform the particular operation and to do any other work that the surgeon may deem advisable. Such an agreement protects the surgeon performing the operation, provided, of course, that the agreement is signed by all persons to whom the surgeon owes a duty of care. For instance, if the patient is a married woman, or a minor, then, in addition to the consent of the patient, there should also be obtained the consent of the husband, or father, in order for the surgeon to be protected against the right of the husband, or father, for injury to his interest in the wife, or child, as the case may be; and, unless an emergency exists, the surgeon should secure not only the consent of the husband, or father, but also the consent of the patient, because it has been held that a husband has no authority to consent to a dangerous operation on his wife and same would probably be true in the case of a minor of more than tender years. But it has been held that failure to obtain the father's consent before administering an anesthetic to a minor seventeen years old, who, in company with his adult relatives, has applied to a surgeon to be relieved from a small tumor, will not render the surgeon liable to the father for the death of the boy.

It is the duty of the physician who is attending a person suffering from a contagious, or infectious, disease, to warn members of the family and others liable to exposure, of the existence and nature of such disease, and to use such precautions as are necessary to prevent the communication of the disease to other patients attended by him. If, knowing of the existence of such disease, he fails to warn those liable to exposure, or visits other patients without taking the necessary pre-

cautions to prevent the communication of the disease, the physician is negligent and is liable in damages to any such person suffering as a result of his negligence.

It has been held that, if a physician has to leave town or, for some other necessary reason, must be away from a case, he may recommend or employ another physician to treat the patient and, in the absence of negligence in selecting such physician, will not be liable for the negligence or lack of skill of the substitute practitioner.

However, to hold a physician responsible for negligence, the patient must have acted with due care in assisting in caring for himself and if the injuries result in part from his own contributory negligence, he has no cause of action. But the negligence of the patient must have been an active and contributing cause to the injury and where such negligence was subsequent to the negligence of the physician and merely aggravated the injury inflicted by the latter, the negligence of the patient affects only the amount of the damages recoverable by the patient. The law requires the physician to use reasonable care and skill in determining the frequency of his visits, and due diligence in making those visits unless he has been discharged and the relation thus ended by the patient. It is the physician's duty to give to the patient, or to his family or attendants, all necessary instructions as to the proper attention to be given to the case. Furthermore, the physician, after his actual personal service is completed, should give the patient proper instructions in reference to the future treatment of the ailment if it is not, at that time, completely healed. When the physician undertakes a case, he impliedly agrees to attend the patient throughout that illness or until he has been dismissed. The patient accepts the treatment by the physician and is supposed to rely upon the judgment and knowledge of the physician and the latter is required to carefully and properly determine when the relationship shall end, unless, of course, the relationship is theretofore terminated either by the consent of the parties or by the patient's dismissal of the physician.

The cases hold that the physician has presumably done his duty and in a malpractice suit the plaintiff has the burden of proving want of ordinary care and skill. The burden is not changed by the fact that the treatment resulted unsuccessfully, but if the treatment plainly indicates that the physician has been negligent the burden

of proof may shift and the physician has the burden of disproving the *prima facie* negligence. For instance, the burden of showing care is on a physician who leaves a sponge enclosed in a wound after the performance of an operation.

According to the ruling of the Supreme Court of Florida, a malpractice suit must be brought against the physician within three years or it is barred by the statute of limitations unless the action be one for battery or for the wrongful death of the patient, in either of which instances our statute requires that suit must be filed within two years. The general law seems to be that the statute of limitations on an act of malpractice ordinarily runs in favor of the physician from the time of the negligent act rather than from the time of the consequential injury.

In conclusion, it has been attempted herein to cover very briefly, and in an elementary manner, the most important phases of the relationship between the physician and the patient from the time of the inception to the termination of the relation. It is hoped that it will be of some assistance to the physician in arriving at a better understanding of the duties and liabilities placed upon him by the law in the practice of his profession.

VARICOSE VEINS AND VARICOSE ULCERS OF THE LOWER EXTREMITIES*

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In treating this subject I will endeavor to eliminate, insofar as possible, as much of the elemental and simple phases of this disease process as will be consistent with perfect understanding. Those points will be emphasized which I consider of paramount importance in leading to a clear understanding. I will begin with a hypothetical case of an average victim.

There walks, or rather limps, into my office a man of about 35 years of age, complaining of a sore on his left leg. This sore has been there for years. It has healed for short periods of time on several occasions. It has been the most disabling factor he has ever experienced and his physical efficiency has been very seriously impaired. His work as a brakeman has become difficult and he realizes that soon he will be unable to continue. When healed the slightest injury

causes a recurrence, and at times the pain is agonizing.

Here is a man who is truly a victim. He is denied joyful indulgence in almost every phase of human endeavor and pleasure. His earning capacity has progressively decreased for several years. He is the lone supporter of a large family and has no savings to weather a financial storm. Here then is a case where it is imperative that the patient receive a curative treatment that will not take him off of his feet and job.

The approach to this problem is accomplished through a general physical examination. Numerous and dangerous are the pitfalls for those who consider and treat the condition as purely a regional factor. Never forget that a benign injection treatment may be blamed for a death which was caused by an unrecognized and rapidly developing co-existing condition. An injection may be blamed for the subsequent appearance of a diabetic ulcer, or of gangrene, symptomatic of Buerger's disease. Question closely for symptoms of coronary disease. A coronary thrombosis may be placed at the feet of the injection treatment, because of the similarity of the two processes, and the assumption that some of the solution gave a coronary irritation with thrombus formation.

We now turn towards a regional examination. Varicose veins are present in both legs, from the knees down onto the feet. There is an ulcer on the left leg just above the internal malleolus. In reviewing 64 cases of leg ulcers, Goodman found 25 on the right, 26 on the left, and 13 bilateral. All on the left leg were varicose ulcers. Of these 73% were Wassermann negative. Of those on right leg 40% were Wassermann negative. This case has a negative Wassermann. I shall leave to your memory the minor co-existent symptoms and secondary changes.

The ulcer is about 2½ inches in diameter, and presents the usual characteristics of co-existent granulation and necrosis. There is a large amount of exudate and some infection. Bacteriological study from the ulcer shows no constant organism. Those present are secondary invaders and play no part in the ulcer process. In a review of 320 cases, Baerthlein found staphylococci—308 cases; diphtheroid—178; colon—98; streptococci—66. The ulcer is surrounded by edema which diminishes as it advances upwards on the leg. Pain is most marked in and immediately around the ulcer.

*Read before the Fourteenth Annual Meeting of Florida Railway Surgeons' Association, Hollywood, May 1, 1933.

In order to gain a clear visual impression of just what is going on in this leg, we must have a definite vision of the anatomy of the vein. This circulation consists of the superficial and deep portions. The deep system lies deeply among the muscles and bones, and is composed of the anterior and posterior tibial and peroneal veins. These unite to form the popliteal and extend upward into the femoral, external iliac, common iliac, and inferior vena cava. The superficial circulation is conducted in two principal vessels, the internal or long saphenous, and the external or short saphenous. The short saphenous lies along the outside of the tendo-achilles and posterior aspect of the thigh and ends in the popliteal vein. The long saphenous, the principal offender in this discussion, lies along the medial aspect of the entire leg and enters the femoral in the groin. All of these veins possess valves. There are many anastomoses between the superficial and deep veins through the communicating veins.

Before treating any case of varicose veins you must know the existing conditions of the superficial and deep veins. This is accomplished by the Trendelenburg tests and Perthe's modification of the Trendelenburg tests.

The Trendelenburg tests determine the efficiency of valvular function in the superficial veins. This is accomplished by emptying the varicose veins and observing the direction and rate of refilling. The vein may be emptied by compression at the lowest point with the right hand and stripping upward on the vein with the left hand. With both hands holding the compression, if the veins fill up rapidly the communicating veins are patent and their valves are incompetent. The saphenofemoral valve is tested in a similar manner.

The Perthe's modification of the Trendelenburg test is the test for patency of the deep vein, and is by far the most important test. I then apply this test to my patient by spiraling an elastic bandage about his leg, from foot to knee. This bandage must be tight enough to obstruct all superficial veins. He is now asked to walk about for ten or fifteen minutes. If he experiences agonizing pain in the entire bandaged leg, we will know that his deep veins are occluded, and the entire leg is without any venous circulation as long as the bandage remains. This patient, however, feels an increased comfort and we know that the deep veins are functioning and that the superficial veins are not compensatory.

The recorded causes of these varicosities are legion and unconvincing. I will leave their investigation to your private study.

Now, let us consider the pathological physiology going on within these veins and in the region of the ulcer. It is here we would find information that has revolutionized the understanding and technique of their treatment. Should we inject (as has been done) a small amount of lipiodol into one of the veins while the leg is supported in a horizontal position we would see by fluoroscopic observation that the flow is slowly towards the heart. If the leg were then lower to a 45° angle we would find practically a stand-still. Lowering the leg below this angle causes a reversal of the flow and the blood flows peripherally. We have here then a "vicious circle" of blood. As the blood flows upwards in the deep circulation a small percentage of it spills out into the superficial circulation, through the incompetent valves of the communicating veins. This blood then flows downward, through the superficial veins and endeavors to enter the deep circulation at a lower point. We now see the creation of a condition wherein some blood is removed from the general systemic blood stream and is deprived of an opportunity to become purified. Should we take a blood chemistry from one of these veins under standing conditions, we would find a non-protein nitrogen two to three times above that obtained from the arm in about 65% of the cases. The CO_2 content is definitely increased, and the O_2 is definitely decreased.

There is then initiated a process whereby the osmotic pressures of the tissue fluid and of the stagnant blood tend to become equalized and result in an extensive edema. This inactivated tissue area then becomes a veritable cess-pool of metabolic end-products. Tissue sloughing of the devitalized area is the result.

Now, as we see and understand the process that produced this ulcer we can clearly understand what has to be done to set in motion the poisoned stagnant fluid that permeates the tissues of the ulcer area. This is accomplished by obliterating the dilated veins that permit their serum to flood the involved area. Obliteration of these functionless and harmful enemies will be striking at the source of the disorder. Obliteration of these veins does not increase the burden of the deep veins, but lessens their load, since the deep veins have been carrying their usual quantity of blood plus that amount involved in the "vicious circle."

The first step of treatment must include correction of any general and contributory conditions that will counteract local treatment. If these are not corrected the efficiency of local treatments will be greatly impaired.

The history of local applications to varicose ulcers would sound like the history of *materia medica*. Every drug imaginable has been tried, and found wanting. I have come to the conclusion that in typical varicose ulcers all local application to the ulcer area of salves and antiseptics for healing effects are worse than useless. They are more often harmful than helpful. They give the patient a new hope and sense of security. This new hope delays the proper curative treatment and the local pathology becomes worse and less responsive to the proper treatment. Larger scars finally result and give greater opportunity for the development of true trophic ulcers in the scar area.

Surgical removal of varicose veins is a procedure for which I see no justification. Surgical treatment carries a mortality rate of about 7/10 of 1%, and a high recurrence. The injection treatment has a mortality of about 24/10,000 of 1%, and a low recurrence. Surgical treatment necessitates an anesthetic, hospitalization, and much anxiety and expense.

Treatment of varicose veins by the injection method is nearly a century old. The solutions used have been many, going from perchloride of iron through iodotannin, alcohol, phenol, bichloride of mercury, sodium bicarbonate, and many others. The modern solutions have been introduced within the past 15 years.

The solutions used for injection are irritating to the endothelium of the veins and produce a chemical venitis. The venitis is followed by an adhesive clot formation, which organizes, and finally may become canalized. Stagnant blood from this point up to the next communicating vein, or up to the femoral junction becomes clotted and organized. The vein becomes contracted and hardened. This sclerosing effect is contrasted to a true phlebitis, in that the venitis causes atrophy and no pain, edema, or extension of the venitis. The venitis never recurs.

Embolism is the cry raised by those opposing the injection treatment. This rarely, if ever, occurs with an improved technique. The clots are not of the infectious phlebitis type. Injection into the perivenous tissues is an embarrassing error in technique which may lead to a severe

complication. The more irritating fluids will cause a slough of the infiltrated tissues. The sugar solutions are the least apt to cause this complication. In cases where perivenous injection has been made, leave the needle in place in the perivenous tissues and inject 10 to 20 cc. normal salt solution to dilute the injected fluid.

Contraindications to injection treatment are few and simple. There are two conditions that should be foremost in the mind of the examiner before treating any case by injection method. These are occlusion of the deep circulation and infective phlebitis of superficial or deep veins. If there is any history of an infectious phlebitis, be extremely careful. If the superficial veins are injected in the presence of a deep phlebitis, occlusion of both systems may result, and the end result would be a moist gangrene of the extremity. Pregnancy is no longer a contraindication, but better and quicker results may be expected after delivery. When there are varicose veins found in the upper thigh and lower abdomen, close examination must be made for portal thrombosis, or obstruction of portal cirrhosis. Age and mild decompensation are not contraindications.

To sum up, we may say that all cases with a patent deep circulation and without infectious thrombophlebitis may be treated by the injection method.

I have listed below the solutions employed in the order of preference:

1. Calarose (Eli Lilly)—Invert sugar 75%; cane sugar 5%. Seldom causes cramp;
2. Quinine and urethane—Two cc. Is not painful and has advantages of small doses;
3. Invertose—plain solution—invert sugar in 50%, 60% and 70% solutions;
4. Invertose compound—Invert sugar and sodium salicylate—painless;
5. Sodium salicylate—20%, 30% and 40% solutions—marked cramps;
6. Sodium chloride—20% and 35% solutions and not more than 10 cc.—severe cramp.

The invert sugar solutions are the safest and are giving satisfaction everywhere.

We have selected calarose as our solution to be injected, and are now ready to make injections. We have selected a time when the edema is at low ebb and the veins are more readily accessible. The patient is sitting on the end of an operating table with his feet hanging down. If I would wish for the veins to fill better I would have him

stand. A rubber tourniquet is applied just below the knee. I often use the cuff of a sphygmomanometer, so that the pressure can be accurately gauged. We have now reached a very important stage, where success or failure will be determined. I will give here my own procedure wherein I have modified the usual technique. This modification greatly expedites and increases the efficiency of the procedure.

Since the result depends upon the cauterizing effect of the sclerosing solution upon the endothelium of the veins we will endeavor to inject the solution into an empty vein. The smallest calibered needle that the thick solution can be injected through conveniently is used. Any plain 5 cc. syringe may be used for the insertion of the needles. Insertion is started adjacent to the ulcer area and at intervals of three to four inches apart. As each needle is determined to be in the vein the syringe is removed from the needle and a blunt pointed stilet is inserted a short distance beyond the point of the needle. After all needles are inserted in this manner the leg is elevated and the veins drained of blood. The tourniquet is replaced and the leg lowered to a horizontal position. Injections are now made through each needle. A Luer-Lok Control Pressure Syringe is most satisfactory. At the completion of each injection the needle is stabbed on through the opposite wall of the vein, so that there will be no leakage through the needle. The syringe is now removed and the next needle injected. The needles are removed after several minutes and sponges bandaged over the puncture areas. The tourniquet may now be removed.

With this technique the procedure has been expedited. The sclerosing solution has been held in undiluted contact with the venous endothelium for a satisfactory period of time, and the reflux of blood through the needle punctures has been minimized.

Now we are confronted with the selection of a bandage. In this selection two factors must be present for satisfactory results. These two factors are compression, and not changing the bandage every day. Employment of these will cure ulcers, even though the veins are not injected, but recurrence will always loom ahead.

The elastic Ace bandage offers compression that is readily applied, easily controlled and economical. A 3-inch bandage, of five yards or more in length is satisfactory. Now, place a compress, smeared with any mild ointment, over the

ulcer and hold in place with several turns of bandage. Take any ordinary good quality bath sponge and place over the ulcer area so that it will overlap the ulcer margins. Now anchor this sponge with several turns of bandage. Apply the Ace bandage, starting just below the knee and including the arch of the foot by a figure 8 turn.

For several dressings this bandage is changed not oftener than about every fifth day. There is no better dressing for the ulcer than to be bathed in its own serum exudation. The bandage is not to be changed earlier unless the discharge is very profuse and becomes obnoxious, or unless it becomes very painful, in which case it will usually be found that the Ace bandage has slipped.

After a few dressings, the interval between dressings can usually be stretched to seven days. The patient is instructed that it is necessary for him to be on his feet most of the time. The sponge and bandage acts as a pump, working with the contraction of the leg muscles while walking. The sponge and bandage are to be alternated with fresh ones and laundered before the next dressing.

This bandage has one disadvantage—the tendency to slip and give an unequally distributed pressure. In careless and ignorant individuals, and in those with an awkwardly shaped leg for keeping the bandage in place, the Unna Boot is recommended. This gives a splendid boot that will not slip, but once applied is not adjustable.

Any veins missed may be treated in the same manner at any later dressing. If the ulcer is extensive skin grafting may be added under the bandage.

A few weeks later it will be found that the ulcer has entirely healed; the leg has become much smaller and the old ulcer area smooth. The patient is happy and the doctor is contented.

OUR PART IN THE NEW DEAL,*

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Tampa.

Today it is my privilege, upon invitation of the program committee, to speak for fifteen fleeting minutes on the program that Dr. Black and his colleagues have formulated to meet the manifest crisis in American medicine.

The sponsors of the new deal have acknowledged with an audacity we had come not to

*Read before the Florida Midland Medical Society, Lakeland, October 26, 1933.

expect in American politics, that difficulties as dire as ours may require remedies more drastic than we have been accustomed to consider and from a Congress that was more reluctant than it seemed, they have wrung permissive legislation that makes drastic experimentation possible in the fields of political action and economic control.

The medical spirit long drugged by the narcotic of inaction must be revived. Never has a national demand, save in war time, been heartened by a wider or more urgent demand, and today it is in anticipation of short sighted protests and selfish purposes that may, in the months immediately ahead, seek to steal the livery of a legitimately critical consideration of our economic program that I, as a doctor, want to suggest the attitude I think current circumstances require that American medicine take toward our economic program.

Neither the New Deal nor New Dealers can rightly ask exemption from the sincere and sustained critical judgment of the opposition, the quacks and patent medicine vendors. We cannot claim infallibility, and by that sign regard a constructively critical analysis of our plans *lese-majeste*. Our economic program is not a divine revelation that we cannot question without impiety. It is simply an expression of the best judgment of a group of intelligent men who, under mandate from us, are fighting against time to prevent a collapse of our sacred traditions which are for the many instead of the few. It is important that we let our best critical judgment play continuously upon the various parts of this program.

But we have reached a critical juncture in American affairs; the circumstances of this new age of science and technology have made much of the policy and practice alike of American medicine obsolete. Far-reaching readjustments in structure and function, long overdue, are now imperative. And the clock will not wait while we dally. The ghost of social collapse is at our windows and council chambers. Under such circumstances the normal chess play of selfish motives is not only irrelevant but treasonable.

It is of supreme importance to our profession and to the toiling millions that our leadership should be given the utmost of understanding collaboration in its historic task of readjusting an old order to a new world.

The national crisis has given unprecedented force to the appeal of the public problems. With fresh minds and whatever new trials of economic

policy may be necessary to lead us into a stable and significant future, we must be prepared to meet them. I believe that the rank and file of the doctors will answer this appeal of their leadership with universal and ungrudging support. For, whatever a few laggard leaders may think the masses of American doctors are learning in the harsh school of experience that we are past the point at which beating the tom-tom for obsolete traditions of policies and economics can bring recovery and stabilization to the American doctor.

It was not always so; in the days of our phantom prosperity we were sleek and self-satisfied. We were well-fed and wanted nothing so much as to be let alone. We were impatient of those queer persons who were forever raising critical questions about our profession. As if anything could possibly be wrong with a profession that paid such excellent dividends.

The era of prosperity that ended in 1929 was, in consequence, an era in which new ideas in the field of medical economics did not sweep the mass minds of doctors. As an old Scotch phrase puts it, the heather was wet and fires did not sweep easily across the fields. The program now before us would have been laughed out of court by the doctors then hovering over real estate profits and, even the little man was drunk with dreams of paper profits of speculation, and so turned a deaf ear to the advocates of economic adjustments that might well have averted the disaster that has darkened our lives.

Today the situation is exactly the reverse. The heather is dry; disillusionment has done its perfect work; the profession is straining at the leash of old dogmas and economic policies that have failed to keep hunger from the stomach, cold from the body, and fear from the heart. Doctors everywhere are fumbling blindly for some way out of the blind alley into which a blind leadership has led them.

This historic hour of our crisis has arrived. Our program of economic recovery rests with each community. It is not for us to speak of a European country as a guide for America when some of them are not as large as some of our states. America more clearly represents the whole map of Europe. There is not a condition in all Europe that cannot be duplicated by some part of America. I am all the more content to restrict myself to this one aspect of our economic program because, in my judgment, it is not only

the most important single emergency measure before organized medicine, but for the long future, is imperative if our profession is to endure.

I do not speak as a new convert to this doctrine. In season and out of season, I lifted my voice and lent my pen to the proposition that we must move to better service, average fees and smaller profits for service rendered or resign ourselves to an increasing insecurity and the ultimate collapse of our high powered machine. From the onset of the depression until today I have not wavered in this conviction. I have consistently contended that the very continuance of our present economic policies would end in ruinous competition of the sweat shop variety.

In this hour of national crisis, I cannot do other than repeat, that our economic machine is in trouble because our capacity to serve has not kept pace with the capacity of the public to pay. It is obviously self-defeating for us to get ourselves into position to give vast quantities of service unless, at the same time, we see to it that there are vast masses of customers ready with money with which to pay. Unless we can break the back of contract practice, quacks, civic and government intrusion on our field, even our existing investment will become a frozen asset.

We must not fall into the easy error that things will take care of themselves. The contrary may be true. The working millions are not only industries' servants; they are our customers. It is our duty to see that they are free to choose from among us. Despite its complexities, a simple and single challenge has coiled at the heart of our economic depression through which we have been passing. Can we prove ourselves as capable in producing consumers as we have proved ourselves in producing service? Unless we can, we must resign ourselves to the certainty that our economic order will slump into chronic depression and suffer ultimate collapse.

This is the beating heart of our medical recovery program. Political leadership is now trying to bring about what the best business leadership has known, all along, must be brought about if our government is to be kept a going concern. It may be said that the higher wage and shorter hour program can prove both practical and profitable to the doctors who hold industrial contracts, but it may mean incredible hardship, if not insolvency, to the doctor barred from this field by exclusive contracts. There is a point here for the transition period, but no formula, looking to

economic recovery can work equal and exact justice in all directions. I am reminded here that, since 1929, we have been working under a blanket order from chaos, and I think we can, with less danger, run the risk of a *blanket order* from the *spirit of better cooperation*. Here is a magnificent opportunity for the medical profession to step into the breach and with a spirit compounded of courage and caution to follow the flight of the Blue Eagle. Failing that, the government itself may have to face the problem for us and issue blanket orders for our direction.

It may be said that private initiative is at stake in the whirl of affairs in medicine. Let us be honest. It is. Rugged individualism is on the run. This throws an unprecedented challenge to the sincere friends of private initiative. I count myself among the friends of private initiative. I am not at all enamored of the prospect of having my own and the profession's life ordered about by bureaucrats. In the long run I doubt the wisdom of having political persons dictate in detail the plans and procedures of American medicine. I am convinced that if private initiative dies on this continent its friends will be responsible for its death because they failed to make it serve the national life effectually.

Mr. Roosevelt does not want to be a dictator, but neither an intelligent president nor an impatient people will stand by and see the medical profession sink just in order to preserve the dogma of private initiative. It lies, I think, with the leadership of American medicine to say just how far infringement upon private initiative shall go. If the leadership of American medicine will pool its varied genius in a local and nationally integrated effort to work out our economic program neither Mr. Roosevelt nor Congress will spend much time trying to fasten a dictatorship on us.

As I see it we have no choice; we must either find ways and means of making our economic program work or give up the ghost as far as beating our way back to prosperity is concerned. After having developed a plan capable of emancipating medicine from poverty, drudgery, and insecurity, we surely do not want to dismantle it and go back to the ox-cart simplicity and starved lives of pioneer periods.

To the promotion of this plan of our program we must give ourselves with something of the devotion that animated men in the crusades of earlier days and steeled our nerves in the grim days of war.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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AMEBIC DYSENTERY

The recent outbreak of amebic dysentery in Chicago, unfortunate as it is, may have been necessary to direct the attention of the medical profession to the fact that this disease is apparently on the increase in the United States and has become a true public health hazard. The ease with which we now travel from one portion of the country to the other and the numerous contacts which we make in our rapid transits permit the infected individual, who happens to be a traveler or a wanderer, to be of much greater hazard than the individual who resides in the same community year after year and whose contacts are necessarily limited.

One factor which leads up to difficulty in diagnosis is the chronicity of the subacute type with its periods of acute exacerbation often several months apart and usually of short duration. The acute type with many evacuations, each one associated with tenesmus and containing blood, mucus and pus with rapidly developing toxic symptoms and prostration, focuses our attention to this condition at once. The diagnosis can only be positively made by the discovery of the *Endamoeba histolytica* in the stool. Many of us have not seen the *Amoeba* since our student days and we have in part forgotten several factors which are essential to the discovery of the *Amoeba*.

First, the stool must be warm. In the hospital where the discharge can be taken to the laboratory immediately after the evacuation, this factor is of little moment save that the examination should be immediate. However, in private practice where our patient may live several miles away, the technique is somewhat more complicated. Unquestionably, the better procedure is for the physician to carry his microscope and the necessary solutions, normal saline and an especially prepared iodine solution, to the home, there making the examination.

When the examination is to be made in the office the attendants are always instructed to deliver the stool to the laboratory warm. That is not sufficient, however, for often in order to keep the stool warm the attendant places the bottle containing the feces in a container filled with very hot, sometimes almost scalding, water. This immediately kills the *Amoeba* and upon examination only the cystic forms are discernible and without special staining they are usually missed or overlooked. The attendants should be carefully instructed that the containers should

have water but little above blood heat to prevent the destruction of the *Amoeba*. In southern Florida, save in the few cold days of winter months, the *Amoeba* will live for many hours without special care.

It may be of further interest to the physician to realize that in a stool which is fresh, somewhat below blood temperature or even slightly chilled, the activity of the contained *Amoeba* may be increased by warming it or the slide before placing the material for examination upon the latter. This will bring the *Amoeba* back to activity, in which state they are the more easily identified.

One examination is not sufficient to make a negative diagnosis; many slides should be examined from a number of stools and the portion of the material for examination should be selected because of its blood-tinged mucus. The latest diagnostic feature is culturing a portion of the stool on a special prepared media. This method may bring to light the presence of organisms in a stool which has been examined several times but in which no *Amoeba* were found due to their scarcity.

ELECTION OF OFFICERS

It may not be amiss to call the attention of our members to the near approach of the time when so many of our county societies elect officers. The method so often adopted of rotation in office is not a sound one for a medical society, whether it be democratic or not. A few men in every group are outstanding, willing to give of themselves and work faithfully for the good of the unit. Rotation in office within a group of that character would be a fine thing for any society and it would advance.

A second group are able, but often indifferent, make good presiding officers but have no, or fail to display any, great initiative. These constitute the greater number of any group and under this leadership we only mark time.

The third group comprises those who rarely attend, who seek membership only for what they can get out of it, mayhap some office to occupy which requires membership in a county society. Fortunately, this group is small, but under it the society would retrograde.

Often when filling the post of delegate to the State Association, not enough thought is used in the selection. Seemingly anyone who has not

served before is eligible. This should not be. The House of Delegates is the law making and regulating body of the State Association. Its membership should consist of the individuals who have clear vision, willingness to serve, who know of our problems and will attend the meeting. With the apparent trend toward change in the relationship of physician and patient, we need the best, the most capable, to lead us on. Elect the active, farseeing, vision-grasping person to office.

CORRESPONDENCE

AMEBIC DYSENTERY

The following letters have been received from Dr. Herman Bundesen, President of the Chicago Board of Health:

"November 23, 1933.

"Dear Doctor Richardson:

"To keep you informed of the progress of the outbreak of amoebic dysentery having its probable origin in Chicago, I am writing to advise you that to date we have had 302 cases, involving 96 cities, 265 carriers and 22 deaths. It has been traced to almost every state, as well as to Canada and several foreign countries.

"In the November 18th, 1933, issue of the Journal of the American Medical Association, there is a preliminary report of the Chicago outbreak of amoebic dysentery, together with an editorial, as well as information on the diagnosis and treatment of this disorder.

"In the editorial, page 1643, is the statement, 'Repeatedly, American investigators and clinicians have emphasized the increasing menace of amebiasis in this country.' The number of cases of this disease that we have traced from Chicago, indicates that amoebic dysentery threatens to become a major public health problem in your state.

"We are daily learning of cases of amoebic dysentery in which a diagnosis of appendicitis or ulcerative colitis has been made with subsequent operation and usually fatal outcome. The correct diagnosis is made only by autopsy on these cases. Many cases of amoebic dysentery are being treated as intestinal influenza and mucous colitis, appendicitis, or ulcerative colitis.

"We would appreciate it greatly if every physician would advise us of any cases of amoebic dysentery with which they come in contact where there is a probable Chicago origin, giving us the

name and address of the patient. It is our purpose to contact these patients by letter, so that we may learn the names of the hotels and restaurants used by them in Chicago. In this way, we hope to get important data which will enable us to find the carriers or cases responsible or their infestation.

"Any assistance which you may give us in this matter will be deeply appreciated."

(Signed) HERMAN N. BUNDESEN, M.D.

"December 2, 1933.

"Dear Doctor Richardson:

"So that you may be informed as to the present status of the amebiasis situation as it confronts us here in Chicago, I am giving you the following figures for your information:

"To date there have been reported 419 cases, involving 138 cities, with a total of 26 deaths. Apparently these cases originated in Chicago. We have also discovered 384 carriers.

"May I also list chronologically for you, the various steps in relation to this outbreak and its control:

"For some years, approximately two cases of amoebic dysentery have been reported each month to the Board of Health. On August 15, a report of two cases in hospitals in Chicago came to our attention, and investigation revealed that both patients had eaten at one hotel in this city. An immediate examination was made of all food handlers in this hostelry. These examinations, completed by September 1, indicated sixteen persons with active diarrhea whose stools contained *Endameba histolytica*, and eleven carriers of the organism.

"Since available statistics indicate that approximately 5 to 10 per cent of the entire population are infested, this observation did not seem to be reason for serious concern. This was particularly the case since an outbreak in another Chicago hotel in 1927 had apparently been fully controlled by the establishment of certain stringent sanitary precautions. These same precautions that controlled the 1927 outbreak, were established in the hotel concerned in the present outbreak and are still in force. In the meantime, the situation was continuously studied.

"As further clinical cases were not reported from either the hotel concerned or the city at large, it did not seem necessary at that time to make general announcement. Nevertheless a

preliminary report was read before the American Public Health Association meeting in Indianapolis on October 9 and released to the press which, unfortunately, did not apparently consider the item of enough significance to give it widespread circulation.

"The incubation period of amoebic dysentery may be as long as 94 days. Therefore, about the middle of October, reports began to come in, indicating the presence of some cases outside Chicago among persons who had stopped at the hotel concerned during the previous four months. Steps were taken immediately to re-examine every food handler as well as the non-food handlers. Moreover, questionnaires were sent to all persons who had registered at the hotel during June, July, and August. As these questionnaires were returned, the Board of Health of the City of Chicago used the long distance telephone and telegrams to apprise both physicians and patients of the necessity for a study of every case of diarrhea for possible amebiasis.

"By November 5, although only one-fifth of the questionnaires had been returned, enough well authenticated data were at hand to justify us in beginning to assemble them for publication. Full reports were made and published in *The Journal of the American Medical Association*, the information being released simultaneously to newspapers and news periodicals on November 14.

"From the first day that we were notified of the existence of a case of amoebic dysentery, and every day thereafter, as soon as a case was reported to us, we immediately notified the State Director of Health at Springfield, Illinois, and he in turn made a report of those cases to the United States Public Health Service by telegraph each Monday. After thoroughly investigating the situation here in Chicago, Dr. Roscoe R. Spencer, of the United States Public Health Service, issued the following statement:

"'Everything humanly possible has been done to control the outbreak. There is certainly no need for any general alarm. Dr. Bundesen and the Board of Health are to be congratulated on the promptness, aggressiveness and thoroughness with which the situation has been handled.'

"I shall appreciate it if you will advise me of any cases with a possible Chicago origin that come to your attention, and I shall keep you informed, from time to time, as to what is occurring."

(Signed) HERMAN N. BUNDESEN, M.D.

RADIO BROADCASTS, 1932-1933

The following broadcast was arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

THE REDUCTION OF INFANT MORTALITY*

G. S. OSINCUP, M.D.,
Orlando.

It has often been said and truly that the medical profession is striving diligently to work itself out of a job. Year by year it is discovering and perfecting means by which human suffering can be alleviated and human life prolonged. There is no more striking proof of the success of these efforts than that shown by the sharp decrease in infant mortality. It has always been true, and probably always will be, that the highest death rate in the human race is during the first year of life! Over one-half of the infant deaths take place during the first month after birth. Following this first year, the death rate falls year by year until the age of puberty, ten to fourteen years, at which time the mortality rate is the lowest of the entire life span.

Statistics are dull and I quite appreciate that the radio is a poor means of driving them home forcibly, but when I say that the infant mortality has dropped from 101 per thousand as recently as 1918 to 64 per thousand for 1930, a clear saving of 37 lives for each one thousand live births, you have some conception of what has been accomplished.

The primary credit for this enormous conservation of life must go to the medical profession as it was its knowledge of the causes of the high death rate, gained through years of investigation and experience, that blazed the trail which is today being followed by so many welfare agencies of various kinds.

For example, many of you remember the dread with which mothers of young infants faced the "second summer." It was well known that this was a critical period for every infant. The death rate was exceedingly high, principally from so-called cholera infantum. It was the physicians who discovered that milk-borne infections were the principal cause of this disease. It was the medical profession which gave impetus to the

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, March 5, 1933.

campaigns conducted all over the world for the production of clean milk. Working hand in hand with dairy associations, welfare organizations, and various governmental bureaus, deaths from diarrheal diseases have dropped almost fifty per cent. Rather infrequently now does one encounter the severe summer diarrheas, particularly in communities where the milk supply is carefully supervised and where mothers have been taught how to avoid this particular danger.

Many factors other than the milk have entered into this marked reduction in death rate. Housing conditions play a decided part. A survey in one city showed these rather startling figures: in a house containing less than one person per room, the mortality rate was 55.1; in a house containing one person, but less than two persons per room, the death rate was 125.9; in a house containing two persons, but less than three persons per room, the death rate was 170.2. Sanitary facilities play a great part in mortality rates. Poverty is known to increase infant mortality. The employment of the mother has a decided influence on the infant death rate. Almost twice as many infants die where the mother is employed away from home as in cases where she is not employed.

There is a wide discrepancy between cities of the same size. Some with a population of 50,000 to 100,000 have a mortality rate of only 41 while others of the same size have a rate as high as 150. Some cities with a population of from 10,000 to 25,000 have a rate as low as 26 and others one as high as 161. This wide discrepancy is due to many factors; character of the public health work, racial characteristics, density of population and definite efforts toward lowering the mortality rate.

The efforts of physicians to prevent contagious diseases are bearing fruit. We have long known and have proved time and time again the efficacy of vaccination for the prevention of smallpox. No right thinking person can deny this fact. We now have in our armamentarium a means of preventing diphtheria which is entirely efficient and without danger. Typhoid fever can also be prevented. It now seems probable that some day all the contagious diseases will be conquered.

The care and feeding of infants is a subject to which much time should be devoted, as it is in this field that great strides have been made within the past few years. Owing to improved methods, we feel confident that the resistance of the children of the future will be so increased that a longer, happier and healthier life is assured for them.

Breast milk is the best food of all for the young infant and I wish to stress the importance of establishing and maintaining breast feeding wherever and whenever possible. It is an unfortunate fact that breast feeding by young, apparently healthy, mothers in the cities, is becoming less and less frequent. In fact, it is unusual to find an urban mother who can successfully nurse her infant as long as nine months. Why this should be true, is a subject for much discussion. It is not through unwillingness on the part of the mother as the vast majority of them are anxious to nurse their infants. No doubt this problem will be solved before many years have passed, and when the solution is reached another milestone of progress will have been passed.

Illegitimacy seems to be another great factor in increasing the death rate. While accurate figures are hard to obtain, it seems certain that there are three to four times as many deaths among illegitimate babies as among infants of married parents.

The mortality in colored infants is much higher than in white, probably due to a combination of the factors mentioned above, ignorance, poverty, poor housing and poor sanitation.

Deaths during the first 24 hours of life are frequent. This is the result of birth injuries, congenital malformations, improper care of the pregnant woman and hereditary diseases. It seems probable, through proper education of the prospective mother, and through proper treatment, feeding and care of the newly born infant, that the death rate during the new born period can be greatly reduced.

The medical profession, having all these facts at hand, has been striving diligently for years to bring about the excellent results so far obtained in reducing infant mortality. Looking into the future, it is easy to see that still greater improvement is assured. What nobler ideal than to spend one's life in an endeavor to guarantee to every infant born his full span of days free from deformity and disease, sound in mind and healthy in body, that he may fulfill his destiny and help to improve the lot of the human race.

PATRONIZE JOURNAL ADVERTISERS

Advertisers in our Journal bear the stamp of approval of the American Medical Association and also of the Florida Medical Association. They are worthy of the patronage of our members.

STATE NEWS ITEMS

Dr. E. W. Warren of Palatka attended the meeting of the Southern Medical Association in Richmond during the month of November. From there, he proceeded to Baltimore where he spent some time at the Johns Hopkins Hospital.

* * *

Dr. H. C. Babcock has returned to Miami from a stay at San Diego, California. He is located at 828 Brickell Avenue.

* * *

Dr. Henry Hanson, Jacksonville, State Health Officer, attended the meeting of the Southern Medical Association in Richmond, November 14-17. While in that city he also attended the meeting of the American Society of Tropical Medicine and the National Malaria Committee. Dr. Hanson was elected chairman of the National Malaria Committee for the ensuing year.

* * *

Dr. J. W. Hodges, who spent the summer at Hampton, Virginia, has returned to Miami where he will again serve as house physician at the Gralynn Hotel.

* * *

Dr. J. A. Stanford has returned to Ft. Lauderdale after an absence of two years and has opened offices in the Sweet Building.

* * *

Dr. Herrman Harris of Jacksonville was chief speaker at the local Lions Club recently. He gave a very interesting discourse on "The Human Heart."

* * *

Dr. Reddin Britt of St. Augustine has returned from the meeting of the Southern Medical Association held in Richmond the middle of November. He also spent some time at Duke University while on this trip.

* * *

Drs. G. M. Dawson, S. Ward Fleming, W. Y. Sayad and V. D. Stone of West Palm Beach spent some time in Chicago during the month of October, where they attended the meeting of the American College of Surgeons.

* * *

Dr. R. B. Lingeman of Ft. Lauderdale has returned from a two months' vacation spent in Indiana.

Dr. G. H. Edwards of Orlando recently addressed the Federation of Women's Clubs of Lake County at Clermont. His subject was "Fads, Fancies and Allergy."

* * *

Dr. J. S. McEwan of Orlando attended the meeting of the Southern Surgical Association at Hot Springs, Virginia, during the month of November. He presented a paper before the gathering on "Spontaneous Rupture of the Liver Associated with Malarial Fever."

* * *

Dr. L. M. Anderson of Lake City was recently honored by the Columbia County Post No. 57 of the American Legion. Following is the citation of the Post:

"The victories of peace and the character of its heroes are as deserving of recognition as are the illustrious dead of the world's battlefields. In recognition of this fact distinguished service has been awarded a place of honor in the affairs of men, and in witness thereof Columbia County Post Number 57, American Legion, Department of Florida, has established an annual award for distinguished service and citizenship based upon peace time service to the community. In recognition of his outstanding community service in the organization and administration of the Columbia County Emergency Relief Council, and for his untiring efforts in behalf of all civic improvements, together with his record of long service and generosity, both with his means and his personal service to the citizens of Lake City and Columbia County, the 1933 Distinguished Service Medal for community service is hereby awarded and bestowed upon Leonidas Mosby Anderson, M.D., first chairman of the Columbia County Emergency Relief Council, past president of the Florida State Medical Association, former member of the city council, gentleman, scholar and humanitarian."

* * *

Dr. Lawrence Simcox of St. Petersburg announces the removal of his offices to 201 Third Street North.

* * *

Dr. C. L. Davis of Okeechobee spent most of the month of October at Tulane University where he did post-graduate work in surgery. The balance of the month he spent at Hot Springs, Arkansas.

From Orlando, we have the following report: "Drs. H. A. Day, J. S. McEwan, Meredith Mal-lory, Louis Orr, G. S. Osincup and W. E. Sinclair of the Orange County Society, all mighty hunters, spent part of the first week of the season in the woods and all returned burdened with game, in small amounts, but with enormous 'bags' of sore feet and lack of sleep. Dr. H. M. Beardall needs two weeks of hunting to satisfy him while Dr. J. H. Chiles goes for three weeks later in the season. He claims game is then shy and more scarce and requires greater skill on the part of the hunter."

* * *

Dr. Leigh F. Robinson of Ft. Lauderdale has returned from a trip to Chicago, where he attended the meeting of the American College of Surgeons and the Century of Progress Exposition.

* * *

Dr. E. M. Hendricks of Ft. Lauderdale has returned from Tampa where he attended a meeting of roentgenologists.

* * *

Dr. Clyde O. Anderson, a recent graduate of Emory University, has completed his internship in the Tampa Municipal Hospital, and has opened offices with his father, Dr. J. M. Anderson, in the Hassler Building, 333 Third St. N., St. Petersburg.

* * *

The many friends of Dr. C. J. Marshall will regret to learn that he is confined to his home in Sanford by illness.

* * *

The State Board of Medical Examiners held its fall examinations at Jacksonville in November. Forty-one applicants were examined. Revocation of license of V. K. Jindra of Miami was announced.

* * *

At the meeting of the Florida Midland Medical Society, held at Lakeland, October 23, the following officers were elected for the ensuing year:

President—T. M. Rivers, Kissimmee.

First Vice-President—Robert C. Black, Plant City.

Second Vice-President—W. T. Simpson, Winter Haven.

Secretary-Treasurer—James R. Boulware, Lakeland.

Dr. Jack Halton, who opened offices in the Citizens Bank Building of Tampa some time ago, has moved his family from Sarasota. They are located at Shady Brook Inn, 405 S. Boulevard, Tampa.

* * *

At the meeting of the Florida East Coast Medical Association, held in Coral Gables the latter part of October, the following officers were elected:

President—Leigh F. Robinson, Ft. Lauderdale.
Secretary-Treasurer—Spencer A. Folsom, Orlando.

Orlando was designated as the next meeting place of the organization.

* * *

The Tallahassee Medical Club held its second meeting on Friday, November 10, at which time the Constitution and By-Laws were adopted and a scientific paper read by Dr. L. L. Dozier of Tallahassee.

This Club, composed of physicians of Tallahassee and Leon County, was originated for the benefit of the local physicians and is in no way to supplant the District Society. Meetings are to be held on the second Friday evening of each month except those months in which the district meetings are held.

There is to be only one scientific paper at each meeting and after the discussion of that one paper, a round table will be held. The Club will also hold social meetings on certain occasions.

The following officers were elected:

President—J. K. Johnston.

Vice-President—M. F. Boyd.

Secretary and Treasurer—O. G. Kendrick.

* * *

Dr. S. B. Strong, (Major M. C., U. S. Army), recently of Havana, Cuba, and Panama City, Florida, was called to active duty November 9 and assigned to general surgery in the Station Hospital, Fort Oglethorpe, Ga. Major Strong is a veteran of the World War and was stationed at Camp Jos. E. Johnston, near Jacksonville, during a part of 1918 and 1919.

* * *

Dr. and Mrs. Max Gherltler of Miami have returned from France where Dr. Gherltler joined a group of New York physicians inspecting the Thermae Resorts.

COMPONENT COUNTY SOCIETIES

BROWARD COUNTY MEDICAL SOCIETY

At the October meeting of the Broward County Medical Society, the following members were appointed to serve as a Medical Economics Committee:

E. M. Hendricks, chairman. Ft. Lauderdale
 B. F. Butler. Hollywood
 Leigh F. Robinson. Ft. Lauderdale

COLUMBIA COUNTY MEDICAL SOCIETY

The Columbia County Medical Society met in called session at Lake City Tuesday afternoon, November 7th, to consider the schedule of fees to be paid by the Emergency Relief Council for handling cases referred by the Relief Organization. After a generous discussion the following schedule of fees was adopted and ordered submitted to the Emergency Relief Council as the basis on which members of the Columbia County Medical Society would handle cases: office calls, \$1.00; city calls, \$2.00; city night calls, \$3.00; country calls, \$3.00 plus 25c mileage each way; country night calls, \$4.00 plus 25c mileage each way; obstetric cases, \$25.00, including prenatal and 14 days post-partum care. The above schedule of fees is identical with the one submitted by Mr. Fagg, Director of the Federal Emergency Relief for the state of Florida, except in regard to country calls at night, obstetric fees and mileage. It was brought out in discussion that well-kept records of automobile expense have demonstrated that the operation of an automobile costs a good deal more than the schedule of mileage fees as submitted by Mr. Fagg. The Secretary was instructed to advise the Columbia County Emergency Relief Council of the action herewith taken, and a copy of this schedule be furnished them.

A contemplated program by the Cancer Control Committee of the Florida Medical Association was discussed, and it was agreed that an effort would be made to have members of the State Committee address the combined meeting of the Columbia County Medical Society and the Suwannee River Medical Association on or about January 5th. Details of this meeting can be worked out in conjunction with Dr. G. R. Holden of the State Association.

There being no further business the meeting adjourned.

DADE COUNTY MEDICAL SOCIETY

THE DADE COUNTY MEDICAL SOCIETY "WENT OVER THE TOP" AT ITS ANNUAL MEETING HELD DECEMBER 1. DUES FOR 100% OF ITS 179 MEMBERS HAVE BEEN COLLECTED FOR 1933. THUS, DADE COUNTY MEDICAL SOCIETY HEADS THE LIST OF PAID-UP SOCIETIES.

This is an outstanding achievement. Dr. H. A. Barge, the treasurer, put forth unusual effort in collecting the membership dues. Any society as large as that in Dade county is composed of members who are prompt to pay, those who procrastinate and the chronic delinquents. Many societies successfully collect from the first two classes while members of the third group are dropped from year to year. Dade County Medical Society did not lose a member in 1933 for non-payment of dues. In 1927, Dr. Gerard Raap, then the treasurer of the Dade County Society, accomplished this same feat. Dr. Raap was president of the Society during the year 1933. Possibly this has some significance. At any rate, Dr. Raap and Dr. Barge make a fine team.

It is not only in the matter of payment of dues that the Dade County Medical Society is outstanding. During the year, the Society has had a series of attractive radio programs. Numerous requests have come in to the State Association office for copies of the splendid radio talks given over Station WIOD. The Dade County "Bulletin" has been issued monthly during the year. It is an attractive, informative publication of which the Society may be justly proud. Its editorials are strong and well written. The Society has been very active in prosecuting illegal practitioners and is to be complimented on the fact that it is making the county less and less attractive to the unethical and the unscrupulous.

Thus, the fact that the Society is 100% paid is an indication that it is a united, powerful and well-functioning organization. Congratulations, Dade County Medical Society.

At the annual meeting of the Dade County Medical Society held recently, the following officers were elected for 1934:

President—Roy J. Holmes.
Vice-President—F. A. Vogt.
Secretary—Robert T. Spicer.
Treasurer—H. A. Barge.

Editor of "Bulletin"—Wm. W. McKibben.

Board of Censors—M. J. Flipse, Chairman; E. B. Maxwell and R. N. Burch.

DUVAL COUNTY MEDICAL SOCIETY

The annual meeting of the Duval County Medical Society was held at the Mayflower Hotel, Jacksonville, December 5. The following officers were elected for the coming year:

President—Theodore G. Croft.

Vice-President—William S. Manning.

Secretary—B. F. Woolsey.

Treasurer—J. W. Hayes.

The plan of medical relief for the clients of the Federal Relief Administration which has been adopted by the Duval County Medical Society, after careful study on the part of its Medical Economics Committee, consists of three parts: (1) The employment of four physicians on salary to do the routine work for ambulatory cases at the Duval County Hospital morning clinic. (2) Home visits by members of the Society to the homes of indigent sick at an agreed compensation for each call, the money earned to be retained by the individual physicians participating. (3) A consultation clinic, held at the County Hospital in the afternoon, participated in by all members of the Society, the pay for which, though made to individual physicians as required by federal regulations, to go into the treasury of the Society to be used for the benefit of all its members.

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The DeSoto-Hardee-Highlands County Medical Society held its regular monthly meeting on November 14, at 8 o'clock at the Plaza Hotel in Arcadia.

The minutes of the last meeting were read and adopted. The following resolution relating to the death of Dr. J. W. Mitchell was read and adopted:

IN MEMORIAM

JOHN WESLEY MITCHELL, M.D.

WHEREAS, God in His Infinite wisdom hath seen fit to remove from our midst one of our most beloved brothers, Dr. John Wesley Mitchell, and,

WHEREAS, Dr. Mitchell was for years a member of the Tri-County Medical Society, and,

WHEREAS, he, by his genial personality and wholehearted friendship endeared himself to each and everyone of the medical profession with whom he came in contact; and through his professional ability contributed to the upbuilding of the practice and art of medicine and surgery in Highlands County; and,

WHEREAS, by his untiring devotion to the practice of medicine and surgery and his continued sacrifices in the interest of charity he endeared himself to the entire community, and,

WHEREAS, we, the members of the Tri-County Medical Society, feel deeply the loss of our esteemed friend; therefore, be it

Resolved, That the Tri-County Medical Society express its sorrow in the passing of Dr. Mitchell; that a copy of this resolution be forwarded to his wife; that a copy be entered on the minutes of this Society; and that the same be published in the Journal of the Florida Medical Association.

TRI-COUNTY MEDICAL SOCIETY,

H. V. WEEMS, M.D.,

L. W. MARTIN, M.D.,

I. W. CHANDLER, M.D.

The report of the State Economics Committee was read and discussed. Dr. Aurin moved that the Society agree to adopt the fee schedule as outlined in the letter of Mr. Fagg but protest against schedule of fees as it refers to mileage and obstetrics. The motion was carried by a 10 to 2 vote.

At 8:30 p. m. the society listened in on N.B.C. broadcast about the amoebic dysentery outbreak in Chicago.

Dr. W. H. Peacock of Wauchula read a paper on "Chronic Endocervicitis" which was liberally discussed. This was one of the most interesting papers of the year.

The next meeting will be held in Wauchula with election of officers.

ESCAMBIA COUNTY MEDICAL SOCIETY

At the meeting of the Escambia County Medical Society, held December 5 at Pensacola, the following program was given:

The Non-Surgical Relief of Prostatic Obstructions—Russell A. Hennessey and Alfred D. Mason, Memphis, Tenn.

Fractures of the Elbow Joints—J. S. Speed, Memphis, Tenn.

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON
COUNTY MEDICAL SOCIETY

The Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society held its regular quarterly meeting in Quincy on Thursday, October 19th, at which time the following program was given: Artificial Pneumothorax—James A. Redfern, Albany, Ga.

Pyonephrosis—R. F. Wheat, Bainbridge, Ga.
Some Points in Diagnosis by the Aid of the X-Ray—J. C. Davis, Quincy, Fla.
Allergy—M. A. Ehrlich, Bainbridge, Ga.
Clinical Report Uterine Fibroids—W. W. Massey, Quincy, Fla.

There was a good attendance of doctors from the Second District of Georgia and the surrounding territory. Officers for the year 1934 were elected as follows:

President—J. H. Pound, Chattahoochee.

Vice-President—J. K. Johnston, Tallahassee.

Secretary-Treasurer—O. G. Kendrick, Tallahassee.

Doctors O. G. Kendrick, J. C. Davis and J. B. Brinson were named as a Committee on Medical Economics. A motion was made and carried that a Board of Censors be appointed but this Board has not yet been named.

After adjournment, a barbecue was served at the Cotillion Club.

The next meeting will be held in Monticello on the third Thursday in January.

ORANGE COUNTY MEDICAL SOCIETY

The October meeting of the Orange County Medical Society was held in the lounge of the Orange General Hospital with President Hewitt Johnston in the chair. Dr. H. Mason Smith of Tampa read a most excellent paper on "Alcohol," discussing its actions and reactions and the results of abuse. A very active discussion followed, featured by talks of Dr. Ralph N. Greene of Jacksonville and Dr. W. G. Miles and Dr. W. H. Spiers of Orlando. In addition nearly every member related some of his interesting experiences.

A preliminary report was made by the especially appointed committee on the formation of the Orange County Collection and Credit Bureau.

The November meeting was also held at the Orange General Hospital on November 15th with Dr. Johnston in the chair. Dr. W. G. Miles presented a paper on "Tabes," which was discussed in a dissertation by Dr. Spiers on the aspect of its

treatment by malarial parasites and the 30% mortality which results.

Report of the Committee on Economics was presented by Dr. J. S. McEwan in which he presented the Federal Relief schedule, which was adopted.

The committee to draw up the Constitution and By-Laws of the Orange County Collection and Credit Bureau reported, nominating themselves as the Board of Directors, who would serve, two of them for one year, two for two years and three for three years, the vacancies to be filled by election as the terms expire. A new committee was to be nominated, called Publicity, which will endeavor to formulate some plan for counteracting or checking the activities of the many irregulars in town, who are displaying unusual activity in contacting all new arrivals.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL
SOCIETY

Dr. W. Wardlaw Jones entertained the Pasco-Hernando-Citrus County Medical Society, at Dade City, November 9, 1933. Dinner was enjoyed at The Gray Moss Inn, followed by a scientific meeting in the parlor of the hotel.

Minutes of last meeting read and adopted. A letter from Mr. Jean, representative of the Mead Johnson Company was read and accepted as a good reason for his absence.

A discussion was held of the fees proposed by the United States Emergency Relief for the State of Florida, for services rendered patients referred by the different relief organizations. It was moved and carried that the Society accept the fees set forth and recommended by Marcus Fagg, the State Director, as outlined.

In addition to this schedule it was also moved and carried that members of the Society would treat such referred cases for acute syphilis for \$3.00 a treatment with neoarsphenamine, bismuth or mercury injections, the relief organization or state furnishing the medicine.

Dr. Claude Anderson gave a report of "Pericarditis with Effusion" with x-ray pictures which demonstrated the case very well. Dr. Harvard gave a very interesting case report of "Streptococcus Meningitidis."

Dr. Creekmore reported a case of renal colic in a man 27 years of age.

Dr. G. R. Creekmore invited the Society to hold its next meeting with him in Brooksville on December 14. Motion to adjourn carried.

PINELLAS COUNTY MEDICAL SOCIETY

The St. Petersburg Section of the Pinellas County Medical Society unanimously decided to re-establish telephone directory and newspaper advertising and permitted the optional action of the Medical Economics Committee regarding hotel roster publication. This action was taken at the Society's November, 1933, regular meeting at the Soldiers' Home.

Mr. Lester J. Smith, Advertising Manager for the Peninsular Telephone Company, has approved of classifying:

Physicians and Surgeons, (M.D.), Osteopathic Physicians, Naturopathic Physicians, Chiropractors, Naprapaths, under separate captions.

The above classification will be gleaned by the Peninsular Telephone Company from registration of licenses with the Clerk of the Pinellas County Court. Mr. Smith also recommends that the Company shall submit the names of applicants for the classification—Physicians and Surgeons (M.D.) to the Secretary of the Society, before inserting the subscriber's name under this classification. This is in addition to the advertisement paid for by the Society and for which a contract for 1934 has been executed. This contract is subject to cancellation in case all recommendations are not approved by the legal department.

The Committee on Medical Economics recommends seventeen insertions in the Saturday Independent and Sunday Times each. It is hoped that both papers will give free space after they realize that the Society is not asking all for nothing under the farce of ethics.

Society rosters will be printed and mailed to hotels and apartment houses with the request that they be posted near telephones.

The Telephone Company will insert doctors' office hours in their space without additional charge. Otherwise, a charge of 25c a month is made if this insertion is requested in the classification.

The Treasurer feels that to advance money from the general fund for publicity would usurp his authority, because this money represents funds derived from members of the entire Society.

Therefore, the Committee has decided to withhold newspaper advertising until sufficient money is received from members for this purpose and estimates that \$10 will cover all approved publicity for the year. This amount may be paid \$5 at once and \$5 before the first of January, 1934.

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, INC.

State Editor

MRS. S. E. DRISKELL
1410 Windsor Place
Jacksonville, Florida.

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REPORT OF THE RICHMOND MEETING,
WOMAN'S AUXILIARY, SOUTHERN
MEDICAL ASSOCIATION,
NOVEMBER 14-17, 1933

Your delegate wishes to report a most enjoyable meeting. The business sessions brought out practical ideas and plans of action by which the auxiliary may become more worthy of the name. Our hostesses provided for our comfort, pleasure and interest in every detail. Final registration returns showed eighteen delegates and officers, with two hundred eighty-five visiting ladies, every state but two being represented.

On Tuesday afternoon Mrs. Douglas Vanderhoof entertained at tea from 4:00 to 6:00 p. m. in her beautiful home on Cary Street Road. Wednesday morning at 9:30 the general session was called to order in the ball room of the Jefferson Hotel. Invocation by Rev. Beverley D. Tucker, Jr., D.D., Rector, St. Paul's Episcopal Church, Richmond. Following the usual formalities and committee reports, addresses were heard from Dr. Irwin Abel, president of the Southern Medical Association, and Dr. Seale Harris. Dr. Abel laid emphasis on making of the Auxiliary a study club, gaining acquaintance with the health laws of the State, and seeking knowledge of medical history from writings of medical and lay authors. This was again emphasized by Dr. Dean Lewis, president of the American Medical Association, who spoke to us at luncheon.

The treasurer's report showed a 100% paid up membership. It was decided not to increase the yearly assessment at this time.

Of particular interest was the report of the Research Committee given by Mrs. S. A. Collom,

Sr., of Texarcana, Texas. This report reviewed the evolution of medical educational methods.

At 1:00 p. m. the meeting adjourned to luncheon. Mrs. Allison Hodges was toastmistress on this occasion. Mrs. Martha Berry, recently returned from archeological research in Irak, gave a most convincing testimony of Old Testament authenticity.

Following luncheon the afternoon session continued by presentation of State Reports. Activities reported by the various States included, administration of student loan funds, funds for indigent physicians, radio broadcasting, supporting various clinics, establishing mothers' clubs for rural women. Of far-reaching value to the regular school is the plan adopted by Georgia of furnishing all clubs, societies, etc., of any nature, with health programs from the American Medical Association. In addition Mrs. White, 7769 Penn Avenue, Atlanta, Georgia, has had printed and offers to interested county units pamphlets on health subjects. These are known as "Three Minute Health Talks."

The report of the nominating committee was unanimously adopted and after the new officers were introduced the meeting was adjourned.

Wednesday evening a reception for the President, followed by a grand ball, was held at the Mosque.

On Thursday an all-day motor trip was staged for the visiting ladies. This left the Jefferson at 9:00 a. m. and after a short tour of the city and various points of historical interest, proceeded to Jamestown, thence to Williamsburg, which is in process of restoration. Here the modern is yielding to the archaic and shortly the sturdy simplicity of our Colonial forefathers will greet the visitor on every hand. The itinerary included the famous Old Raleigh Tavern, Wren building of William and Mary, the old Court House of 1770 and the Governor's Palace, now being reconstructed. A buffet luncheon was served at the Williamsburg Inn. A tea was scheduled for the afternoon at the Academy of Arts in Richmond, but owing to the late return from the motor trip a visit was made to the St. Johns Church of Patrick Henry fame.

Friday morning there was a golf tournament for the visiting ladies at the Country Club of Virginia.

MRS. CLAYTON E. ROYCE, Jacksonville.

ADVERTISERS' NOTES

PROPHYLAXIS AGAINST SCARLET FEVER

Active immunization against scarlet fever may be secured by the injection of five gradually increasing doses of scarlet fever toxin, given at intervals of one to two weeks.

The Dick test for susceptibility to scarlet fever is made by the intradermal injection of one skin test dose of scarlet fever toxin. Those persons (children or adults) giving a Dick negative reaction are immune to scarlet fever as shown by the fact they do not contract the disease even on repeated exposure. Those persons showing a Dick positive reaction are not immune.

Active immunity against scarlet fever can be induced by injecting five graded doses of scarlet fever toxin consisting of 500, 2000, 8000, 25,000 and 80,000 skin test doses. After several months, when the Dick test is again applied, about 95% of the treated persons will show a Dick negative reaction.

The small proportion of the persons showing a Dick positive reaction, after a series of injections of scarlet fever toxin, should receive a sixth injection of scarlet fever toxin containing 80,000, or better, 100,000 skin test doses.

Those subjects formerly giving a positive Dick reaction, having become Dick negative following the prophylactic treatment with the toxin, are actively immunized against scarlet fever as shown by the experience with pupil nurses protected by the prophylactic injections of the scarlet fever toxin.

In hospitals for contagious diseases where scarlet fever patients are treated, if the immunization of the nurses is properly carried out, experience shows that no immunized nurses develop scarlet fever.

The National Drug Company of Philadelphia will mail booklet on Scarlet Fever Immunization, upon request to physicians mentioning this Journal.

COCOMALT

It has been estimated that in many cities in the temperate zone, fully 90% of the child population shows the effect of vitamin D deficiency in bone and tooth development.

There is no appreciable amount of vitamin D in common articles of food; but by drinking delicious chocolate flavor Cocomalt every day, a growing child is definitely safeguarded from a vitamin D deficiency.

For vitamin D is present in Cocomalt in the proportion of 30 Steenbock (300 ADMA) units per ounce—the amount used to make one drink. Mixed with milk according to directions, every cup or glass of Cocomalt a child drinks is equivalent in vitamin D content to two-thirds of a teaspoonful of good cod-liver oil.

Many physicians recommend Cocomalt routinely during pregnancy and lactation, not only because of this rich vitamin D content, but because of the extra proteins, carbohydrates and minerals (calcium and phosphorus) which Cocomalt provides.

A NEW AND SCIENTIFICALLY CORRECT INSTRUMENT FOR CONDUCTING THE SUBJECTIVE TEST FOR VISUAL ACUITY

American Optical Company has just announced the Project-O-Chart, consisting of projection apparatus to replace the usual illuminated chart for conducting the subjective visual acuity test. This instrument brings a new ease and simplicity to the subjective eye examination. It is available in a table model, and in two upright models, one with a three-toed base and the other with a round base to match a refracting unit.



The Project-O-Chart is a compact instrument with carefully calculated achromatic lenses positioned in an adjustable focussing tube. Charts are provided on slides within the instrument which projects them on a screen which is especially treated to increase illumination and prevent the reflection of glare. The operator simply turns a knob to change from one set of characters to another. Of particular interest is the inclusion in this test material of Dr. Verhoeff's new test character arrangement of circles for visual acuity measurements.

Another important feature is the inclusion of the red-green duochrome test with special duplicate gradated test letters placed for quick comparison in the use of the 20-foot check.

The illuminating system of the Project-O-Chart is designed to obtain maximum light with a minimum of current and, what is of greater importance to the practitioner, the instrument maintains the same intensity of illumination when the test characters are changed from the largest to the smallest size during the examination.

The Project-O-Chart broadens the scope of the subjective examination. It offers to the optical profession a vastly improved technic for the subjective test for visual acuity. It may be used in the practitioner's present examination room. American Optical Company is anxious that all practitioners see this new instrument, and offers to give a demonstration in your own office. A booklet has been published on this new instrument which is available on request.

WHAT EVERY WOMAN DOESN'T KNOW—HOW TO GIVE COD LIVER OIL

What Every Woman Doesn't Know is that psychology is more important than flavoring in persuading children to take cod liver oil. Some mothers fail to realize, so great is their own distaste for cod liver oil, that most babies will not only take the oil if properly given but will actually enjoy it. Proof of this is seen in orphanages and pediatric hospitals where cod liver oil is administered as a food in a matter of fact manner, with the result that refusals are rarely encountered.

The mother who wrinkles her nose and "makes a face" of disgust as she measures out cod liver oil is almost certain to set the pattern for similar behavior on the part of her baby.

Most babies can be taught to take the pure oil if, as Eliot points out, the mother looks on it with favor and no unpleasant associations are attached to it. If the mother herself takes some of the oil, the child is further encouraged.

The dose of cod liver oil may be followed by orange juice, but if administered at an early age, usually no vehicle is required. The oil should not be mixed with the milk or the cereal feeding unless allowance is made for the oil which clings to the bottle or the bowl.

Mead's 10 D Cod Liver Oil is made from Mead's Newfoundland Cod Liver Oil. In cases of fat intolerance the former has an advantage since it can be given in 1/3 to 1/2 the usual cod liver oil dosage.

(To be continued)

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The Squibb Laboratories announce the availability of Refined Diphtheria Toxoid Alum Precipitated with the featured advantage that one injection is sufficient for the immunization of the majority of children against diphtheria. The efficacy of the preparation in immunizing against diphtheria is believed to be due to the fact that the alum precipitated toxin, since it is relatively insoluble, is more slowly absorbed and remains in the body sufficiently long to produce adequately protective amounts of antitoxin.

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(Continued on page 276)



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alcohol from the bottle to the small flask. Some extra stoppers are also supplied.

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COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon ?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	73%
Bay	Allen H. Miller, M.D., Millville.					71%
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		70%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	100%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	100%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	50%
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	78%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	76%
Hillsboro	C. W. Bartlett, M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	87%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	56%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	88%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	89%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	59%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	77%
Marion	J. L. Chalker, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	93%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	Louis Orr, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	92%
Palm Beach	James L. Carlisle, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	95%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	93%
Pinellas	O. O. Feaster, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	96%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	85%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	50%
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	92%
St. Lucie-Okeechobee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	100%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	92%
Seminole	J. T. Denton, M.D., Sanford.	2nd Monday	7:00 P.M.	City Hospital Sanford		100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	Jas. L. Weeks, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	71%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	77%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.

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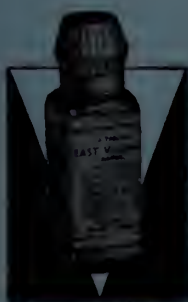
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Florida Medical Association, Inc.

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VOLUME XX
NO. 7

Jacksonville, Florida, January, 1934

Yearly Subscription, \$3.00
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Florida Medical Association, Jacksonville, April 30, May 1, 2, 1934.
American Medical Association, Cleveland, June 11-15, 1934.

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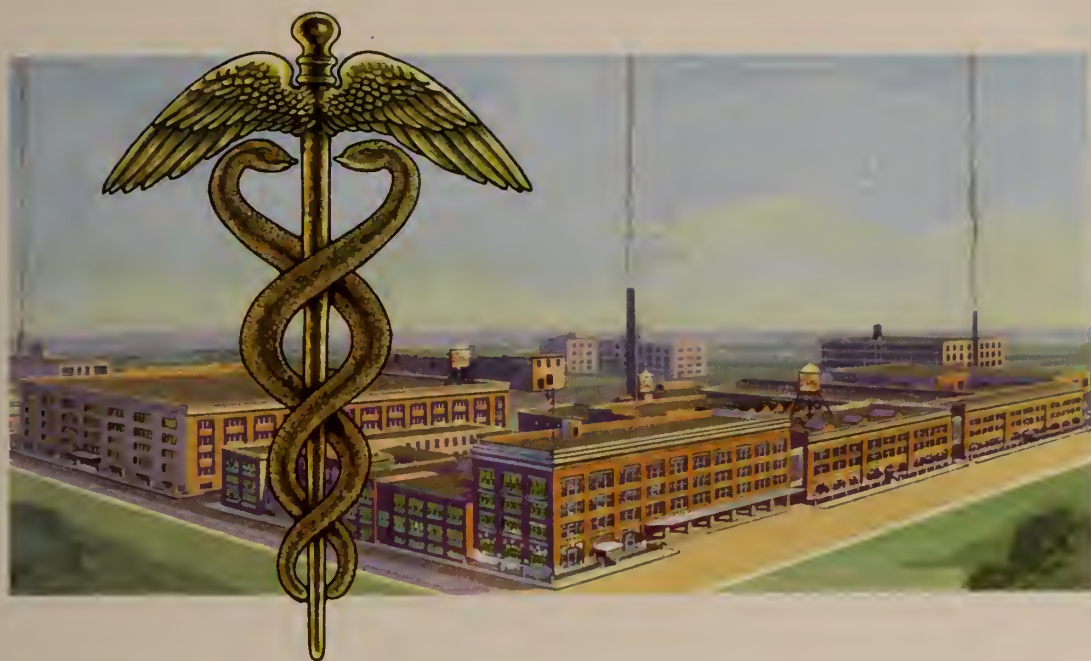
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, January, 1934

Number 7

EVAPORATED MILK IN INFANT FEEDING—A CLINICAL STUDY OF 340 CASES*

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We must face the fact that our modern way of living is making it quite difficult for mothers to nurse their babies. There is a constant need for an easily digested, simply prepared, inexpensive milk for infant feeding. A satisfactory food for babies is one which promotes normal growth and development, is palatable and readily assimilated. Such excellent students of infant feeding as Brennemann,¹ Marriott,² Kerley³ and others⁴⁻⁵⁻⁶ have agreed that evaporated milk fulfills these requirements. Their carefully controlled work has been done with both the well and the sick infant.

Until recently there was a general prejudice against the use of a canned milk in the preparation of food for the baby. But this has changed. The public in this period of economic stress is eager to accept a convenient, inexpensive form of pure milk. The informed medical profession is delighted to have available a clean, safe milk of uniform composition.

Considerable attention has been devoted to the subject of evaporated milk in infant feeding since 1929. James A. Tobey⁷ in the March (1933) issue of the Archives of Pediatrics presents an excellent summary of clinical reports in recent scientific literature concerning the feeding of evaporated milk to babies. Those interested in the technical details of the preparation of the milk, its nutritive value, vitamin and mineral efficiency are referred to articles dealing more specifically with these problems in the relationship of evaporated milk to proper infant feeding.^{8-9-10-11-12-13.}

Evaporated milk is not a proprietary baby food. It is simply cow's milk, concentrated and sterilized, and must not be confused with condensed milk, to which cane or beet sugar has been added as a preservative.¹⁴ Deming and Davis¹⁵ concluded after bacteriological investigation of one hundred and fifty-four cans of evap-

orated milk with anaerobic and aerobic cultures that this milk is practically sterile. The uniformity of composition is invaluable to the physician in prescribing a formula. Government supervision requires not less than 7.8% milk fat, nor less than 25.5% total solids.¹⁶ Complete digestion is assured on account of the very small, friable curd in the stomach.¹³⁻¹⁷⁻¹⁸ The fat undergoes homogenization in the process of evaporation.

This study includes a series of three hundred and forty cases observed since 1928. Gain in weight was considered the best criterion as to whether the child was thriving, because it was assumed that vomiting, diarrhea or other untoward symptom would definitely influence the weight curve.

The first group of eighty infants was seen in the Miami City Welfare Clinic. These were normal feeding cases, of which seventy-six were full term and four premature infants. Ages varied from three weeks to one year. The usual lack of cooperation was encountered with a few of the mothers. The accuracy of the follow-up information is largely due to the efforts of two nurses, Miss Jean Waldron and Mrs. Florence Cooper. Table 1 summarizes the data obtained:

TABLE 1.—SUMMARY—80 INFANTS MIAMI CITY WELFARE CLINIC.

	Average Gain per Week in Ounces.	Average Period of Observation in Weeks.
43 Receiving Evaporated Milk Formulas.....	4.90	17
37 Receiving other Forms of Modified Cow's Milk....	4.29	15.5

The suitability of evaporated milk with this group of infants was noted because in most instances refrigeration of the prepared formula was not possible; limited finances made an inexpensive milk necessary; and simplicity of preparation adapted itself well to the average mental plane of the parents.

The second group consisted of sixty newly born infants observed at the Jackson Memorial Hospital. Thirty of these were given evaporated milk as the sole feeding or as a complement to breast milk. These were compared with a similar control group of thirty, who were fed breast milk alone or in combination with some form of

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

cow's milk other than evaporated. For uniformity, the formula of evaporated milk consisted of a stock solution:

Unsweetened Evaporated Milk..... 6 ounces
Boiled Water 12 ounces
Beta Lactose ½ ounce

This was patterned after the basic formula advised by Sauer.¹⁹ The infant was allowed to take varying amounts of this mixture according to desire. When there were more than four or five stools in twenty-four hours, the amount of lactose in the stock formula was reduced temporarily. With one exception, the formula described above was well borne. In this instance there was considerable vomiting. The symptom was readily controlled with small doses of phenobarbital before the feedings. Figure 1 shows graphically the average gain in weight of these newly born (white) infants.

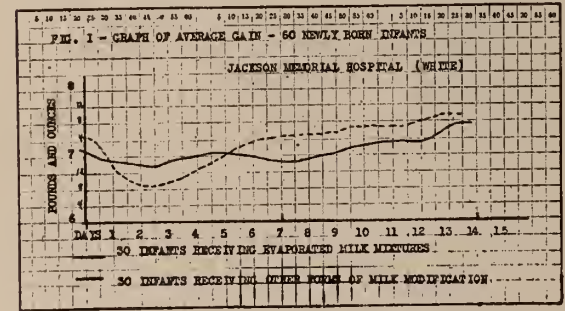


Table 2 represents a condensed summary of information obtained from the hospital records of these sixty infants:

	(A)	(B)
	Evaporated Milk	Other Milk
Average Birth Weight (lbs.)....	7.05	7.33
Average Discharge Weight (lbs.)	7.09	7.25
Average Stay in Hospital (days)	7.70	6.35

TABLE 3.
ANALYSIS OF HOSPITAL RECORDS OF 30 NEWLY BORN INFANTS RECEIVING EVAPORATED MILK MIXTURES.

Birth Weight	Discharge Weight	Net Gain in Oz.	Loss	Stay in Hospital	Remarks
4:10½	4:3½	..	7 oz.	4 days	Premature Release
7:1	6:9	..	8 oz.	2 days	Signed Release
4:10	4:9	..	1 oz.	7 days	
8:0	8:12	12	....	9 days	
6:13	6:12	..	1 oz.	3 days	
7:4	7:10	6	....	8 days	
6:12	7:1	5	....	15 days	
6:4	6:12	8	....	10 days	
8:2	8:2	..	....	9 days	
4:6½	4:1	..	5½ oz.	15 days	Premature
7:7	7:2	..	5 oz.	4 days	
9:12	9:14	2	....	14 days	
7:14	7:13	..	1 oz.	12 days	
9:4	8:8	..	12 oz.	4 days	
5:4	5:5	1	....	4 days	
6:13	6:11	..	2 oz.	3 days	
7:13	7:10	..	3 oz.	9 days	
7:6	7:5	..	1 oz.	8 days	

Two of the infants were premature and lost weight but their stay in the hospital was so brief that no conclusion was drawn. The period of observation in this group averaged seven days. Of the ten who were given solely the evaporated milk mixture from birth, eight had regained their birth weight before dismissal from the hospital. The initial loss in weight after birth averaged less. Routinely, feedings were begun sixteen to eighteen hours after birth. The figures indicate that in this small group of cases evaporated milk served admirably as a feeding for newly born infants. Marriott and Schoenthal² have reported a larger series in 1929, and state that "there were no cases in which it was found necessary to substitute some other form of milk for the evaporated milk because of untoward symptoms or failure to do well."

The third group consisted of two hundred infants observed in private practice over a period from November, 1928, to April, 1933. Half of this number who were fed evaporated milk and a similar number receiving various other forms of milk modification were studied for comparison. Data were obtained from chart records without special selection of cases or differentiation between well and sick babies. All of these children received in addition to the milk formulas the usual orange juice, cod liver oil or irradiated ergosterol. At the age of four months, as a rule, cereals were added and at the age of six months usually vegetable puree or soup was begun. There were the usual intercurrent respiratory infections and other minor illnesses. No set rule of milk modification was followed and the series includes children fed both sweet and acid mixtures of evaporated milk. Dextri-Maltose, Imperial Granum, lactose and Karo Syrup constituted the extra carbohydrates added. Results are summarized in Table 4.

TABLE 4.—ANALYSIS OF CHART RECORDS OF 200 INFANTS (PRIVATE CASES.)

	Evaporated Milk	Other Milk
	When	
Average Age (weeks) First Seen	8.78	7.40
Average Weight (pounds) When First Seen.....	10.20	9.75
Average Period Under Observation (weeks)	21.20	13.10
Average Gain (ounces) per Week During Period Observed	6.16	5.72

SUMMARY AND CONCLUSIONS

1. Babies fed on properly prepared mixtures of unsweetened evaporated milk seem to thrive as well as those fed on other modifications of cow's milk.

2. The chief advantages of the use of evaporated milk are ease of preparation, ready digestibility, economy and safety.

3. A study of three representative types of infant feeding problems reveals no definite disadvantage in the use of evaporated milk.

4. This study is a review of clinical records and not an experiment attempting to prove the value of evaporated milk for infant feeding. The conclusion is evident that, properly modified, evaporated milk may be considered a satisfactory food for infants.

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DISCUSSION

Dr. George L. Cook, Tampa:

I am impressed with the fact that Dr. Quillian's message to us is most opportune. He presents for our consideration a method of feeding infants that is efficient, containing the essential elements for growth and development; one that is economical and certainly the safest as far as the possibility of contamination is concerned.

A few years ago the use of evaporated milk in infant feeding was looked upon by the pediatrician and public as an unfair procedure as far as the infant was concerned. The practice of medicine changes from time to time as far as prescribing and methods of diagnosis are concerned, and so it is with infant feeding. Our methods change because scientific investigations are continually relieving us of false impressions.

Now, an infant is an individual, has an individuality, and that individuality differs in each and every infant. This difference is in their mental and physical make-up, digestive peculiarities, etc. Therefore, we can not do any one thing or feed any one food to all babies and expect them to uniformly do well.

My experience has taught me that evaporated milk agrees in a larger number of cases than most any other one food, but it does not go in every case. My idea of an almost perfect food of this type for Florida babies would be half skimmed evaporated milk. When babies do poorly on evaporated milk it can usually be attributed to the high fat content. I must confess that I am not entirely evaporated milk minded. I still enjoy figuring formulas from certified cows' milk and further confess that this is my routine method when the supply is available.

Permit me to reiterate the fact that Dr. Quillian has brought us a most important message, economically and scientifically sound, and, best of all, a procedure that, if followed carefully, will still further reduce infant mortality in our state.

Dr. William W. McKibben, Miami:

On studying Dr. Quillian's paper, one is impressed with his care in preparing himself from the literature, and in collecting his data from his own observations, also with his characteristic conservatism in drawing his conclusions from three different environmental factors. It is original work like this that enables us to establish definite and conclusive facts, particularly valuable in the safe and sane feeding of infants.

It is a great satisfaction to some of us here who date back to the many milk-borne epidemics of the first years of this century to see the infant mortality rate cut right in two, due to milk inspection, cleanliness, pasteurization, education of mothers and doctors, and simplification of formulas, so that, as we heard today, they are almost fool-proof now.

It is gratifying to us to have demonstrated a type of milk that has decided advantages over bottled cow's milk, in being easily available, digestible, concentrated, economical, palatable, sterile therefore safe, partly desensitized, uniform in composition, nutritionally adequate, dependable, and free from tuberculosis.

It has been found valuable in pylorospasm, pyloric stenosis, in prematures, infections, eczema, gastric ulcers, and in traveling.

Another observer (Lillian Kositz of Los Angeles, in the *Journal of Pediatrics*, St. Louis, Vol. 1, No. 4, p. 426, Oct. '32), recently made similar observations on 217 normal feeding cases and 13 prematures. She concluded that:

1. The average normal baby is able to simulate unsweetened evaporated milk as well as, or better than, bottled cow's milk (boiled or pasteurized) during the early months of life when milk constitutes the sole food, as evidenced by weight increase.

2. Similar results were obtained in the premature infants.

3. The gain in height is practically the same on both foods.

4. Vomiting at the onset of the experiment was reported more frequently in the unsweetened evaporated milk group. Whenever the mother could be persuaded to continue, especially if a good gain in weight was evidenced, the vomiting was later reported as "just spitting up."

5. Diarrhea was not as frequent on unsweetened evaporated milk as on bottled cow's milk.

6. Constipation, although frequently complained of, was not more marked than on bottled cow's milk.

7. The relative frequency of infections as evidenced by colds, etc., was about the same in both groups.

8. The relative incidence of rickets was a little more marked in the unsweetened evaporated milk group, undoubtedly due to the fact that the babies showing active rickets did not receive cod liver oil or viosterol until the rickets was discovered by roentgenogram, this in spite of the

fact that cod liver oil is included routinely in the feeding régime.

9. The developmental points as sitting alone, crawling, standing, walking and eruption of the first teeth, were almost identical for both groups.

Granting that the big tough casein curd of cow's milk was fit only for calves' stomachs, being far different from the flocculent lactalbumen curd of mother's milk, thirty-five years ago, on the Boston Floating Hospital for summer complaint, we regarded it a real catastrophe if a mother lost her breast milk. And yet today, we heard Dr. Quillian open his paper by saying that we must face the fact that our modern complex way of living is making it quite difficult for mothers to nurse their babies. Today the mothers no longer regard it as a tragedy, but usually take weaning quite philosophically.

Years ago, we jumped from formula to formula, hoping to hit on the correct one by chance. It was the custom to start all gastro-enteric cases on a course of calomel, gr. 1/10 every half hour for ten doses, then send a dose of castor oil through as a chaser of the calomel. Then the poor baby was put on starvation treatment of barley water to get rid of the green curds and mucus, even for a week or two, until he was so weak he had no power left to come back, a thing which Marriott warns against now—a food with insufficient calories.

I recall the satisfaction obtained in the infancy of infant feeding by using Imperial Granum to modify the cow's milk. I did not realize then that the curd was softened for digestion, first by dilution with a cereal gruel, second by being brought to a boil, and third, occasionally, I added lime water or another alkali-sodium citrate; again, the starch of the Granum wheat flour replaced some of the sugar which often was causing a scalding diarrhea.

It remained for Marriott to demonstrate that the buffer action or capacity of cow's milk to neutralize the hydrochloric acid of the baby's stomach, lowered the hydrogen ion concentration below the point for optimum gastric digestion. By adding lactic acid or acid fruit juices to whole or diluted cow's milk, the subnormal acidity was corrected and proper digestion ensued by producing, too, a small soft casein curd.

Brennemann fed a group of acutely ill infants unsweetened evaporated milk and decided that they digested the feedings equally well with or without acidification.

Personally, I have found it seldom necessary to combat colic and vomiting with antispasmodic drugs such as atropine or phenobarbital. If breast milk is inadequate, evaporated or dry milk is a satisfactory complemental feeding.

To calculate a formula is simple. Suppose an infant of eight pounds requires two ounces of certified milk per pound of body weight:

Fresh cow's milk.....	16 oz.
Carbohydrate	1 oz.
Water to make total.....	30 oz.

The equivalent is:

Evaporated milk	8 oz.
Carbohydrate	1 oz.
Water to make total.....	30 oz.

Gradually increase the sugar or syrup to 1½ oz; increase the evaporated milk and decrease the water until they are half and half.

Evaporated milk	16 oz.
Dextro Maltose, Lactose, cane sugar or	

Karo syrup	1½ oz.
Water	16 oz.

It was interesting to glance over the pediatric literature this last year and observe some of the present reactions on breast milk. The titles are like this:

"Human Milk Studies"; "Variations During the Day in Volume and in Composition of Fat, Total Solids and Nitrogen, Ash, Calcium, Phosphorus and Chloride Components"; "Demonstration of Toxic Substances in Milk of Lactating Women During Menstruation"; "Occurrence of Nicotine in the Breast Milk After Cigarette Smoking"; "Emotional Problems Related to Breast-feeding"; "Iron Content of Human Milk."

Of interest, too, is the study of soft curd milk. The curds in the infants' stomachs were softer than those after taking unboiled, certified milk; equal to those of boiled milk; but larger and tougher than those of evaporated or breast milk which were about equal.

Dr. Warren Quillian, Miami (concluding):

I would like to emphasize just one point: Evaporated milk is not suggested as a panacea in all cases. I also favor the use of certified cow's milk in infant feeding. And I think that if the Doctors in the Florida Medical Association and the members of the component medical societies insisted on the mothers using certified cow's milk, there would be no need to look for a substitute milk for infant feeding. Proper modification could be made. But, because the use of

impure so-called "fresh milk" so frequently causes trouble for the physician who is attempting to devise a proper formula, I wish that this message could be taken back to the home societies: that the members of the Association be acquainted with the advantages of certified cows' milk, but, rather than take a chance on an improperly prepared milk, use something that is safe, convenient, sterile and suitable in composition. These latter qualities are possessed by unsweetened evaporated milk.

FLORIDA CLIMATE*

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Lakeland.

The medical profession of Florida will have to become more cognizant themselves of Florida's climate as a health producing agent if we would spread this knowledge. Furthermore, if this beneficent factor is to become a boon to those who need it and are able to come within our borders, it behooves us, both as individuals to our personal contacts and collectively to our nation at large, to disseminate this knowledge.

Florida *does have* a health-producing and disease-preventing climate. This statement is affirmed by scientific facts, observations by competent clinicians over long periods of time, and by records from the Bureau of Vital Statistics.

Comparatively recent investigators in biochemistry have shown that calcium is the greatest mineral factor in the metabolic processes of our bodies and also that it is the gateway through which most of the other minerals enter the various cellular structures of the viscera. The further observation has been made that calcium in the system is practically inert except in the presence of one of two elements, namely, vitamin D or ultra violet irradiation. In the presence of either of these factors the effect is identical, these two agents causing an increased absorption from the intestines, an increase in deposition of calcium salts and a correction of faulty metabolism. According to Cantarow, calcium plays the greater part in the following functions: development of bone, myocardial contractions, blood coagulation, and nerve excitability.

It is not within the province of this paper to discuss the action of phosphorus and the parathyroid hormones acting in conjunction with calcium, but to impress upon us the great and necessary uses of calcium and that it is only available

*President's Address, presented before Florida Midland Medical Society, Lakeland, Oct. 26, 1933.

either in the presence of vitamin D or sunshine.

Unfortunately, vitamin D is very scarce and the supply inadequate in ordinary foods, being found, except in minute quantities, only in butter, cream, egg yolks and artificially furnished in fish oil. On the other hand, solar rays in Florida are available in almost unlimited quantities due to the fact that we are near the sun and our rays are more direct and intense. Furthermore, our atmosphere is nearly free from both smoke and dust; outdoor exposures are seldom prevented, even in winter, by severe temperatures, cloudiness or fogs. (The average number of days each winter in this section of Florida with a temperature below 32 degrees is three and the average number of fogs twelve, and these usually only for a few hours.)

The practical application of these facts means that all those conditions due to calcium deficiency may be benefited *here*. Some of these are rickets and underdevelopment in childhood. (I heard a leading pediatrician in New York say that more than 80% of all children in that city showed evidence of rickets, while we know here that even among our poorest it is far below those figures). Tetany is another condition due to calcium deficiency, as is dental caries and many of the nervous diseases.

For centuries the beneficial effect of sunlight has been noted by clinicians. During the past few decades Rollier has been the leading advocate of *supervised* sunbaths as a curative measure in chronic infections. He says: "The rays of the sun are converted in the skin directly into specific chemical energy." He further states that heliotherapy stimulates metabolism and thus makes reconstruction in the body possible. Indiscriminate sunbaths are very dangerous while the value of properly regulated ones cannot be exaggerated.

Extra thoracic forms of tuberculosis respond especially well to sunbaths and thus sufferers from tuberculosis of the joints, bones, lymphatic glands, skin and peritoneum do well in Florida, where the mild climate and the large number of sunny days make direct exposures possible.

As to pulmonary tuberculosis, the opinion of the majority of authorities is that in those cases which are incipient or uncomplicated it makes little difference as to climate, whether they are in cold or warm, dry or moist, high or low altitude, provided they get plenty of fresh air, rest, good food and a suitable environment. Even in these, we find Florida furnishing unusually suit-

able and enchanting surroundings, and Guy Hensdale says the moral effect of bright sunny days and plenty of them is very great. Fishberg says: "Suggestion as a factor in the treatment of tuberculosis has not been given the credit it deserves." Our bright sunny days are conducive to a good mental attitude. However, other clinicians with years of experience are of the opinion that carefully regulated irradiations are very beneficial in pulmonary tuberculosis.

In determining a location for advanced pulmonary cases the effect of the climate upon the heart, blood vessels and nerves are the deciding factors, rather than the lesion in the lungs. Contra-indications for sending pulmonary tubercular patients to high altitudes, according to Fishberg, are dyspnea due to pulmonary emphysema, asthma, cardiac hypertrophy or fatty degeneration of heart muscle, nephritis and arteriosclerosis. Knight would not have those above fifty years of age or those with a tachycardia above a rate of 100 go to a high altitude.

Florida, with a coast line of approximately 1,500 miles and no part more than seventy-two miles from the coast, the lower part of the peninsula being swept by trade winds, practically gives us a marine climate. According to Schroeder, sea air has a profound influence upon the heart and blood vessels. The cardiac activity is increased and the pulse slowed. This, he states, is due to the currents of air and the greater conductivity of moist air. As a result, the blood vessels contract and the skin is cooled.

The conclusion from the above facts is that, with the exception of tubercular suspects and the incipient cases without complication, our climate is superior by far to the average climate for all other types of tubercular cases. But remember that indiscriminate sunbaths may aggravate or even light up a quiescent case.

Not only are those cases of tuberculosis with cardiac lesions benefited by this climate but this is also true of heart diseases independent of tuberculosis. Especially those associated with high blood pressure and chronic nephritis find a favorable influence upon them here.

Rollier says the skin is the ideal factor for regulating the blood circulation. The sun and air baths act in a most favorable manner upon the fine network of capillaries in the skin which regulates the blood circulating in the entire organism.

Shears, of the New York Post-Graduate School, says that in his opinion the open air treatment of pregnancy in general and its toxemia

in particular will soon be as well recognized as the fresh air treatment of tuberculosis. During my eight years' residence in Florida, though giving special attention to obstetrics, I have not seen a single case of puerperal convulsions. A part of this has been due to close prenatal care, even to the point of premature inductions of labor to prevent it, but I think in part it is due to the unlimited fresh air and sunshine to which all our patients have access. Puerperal infections in many hospitals are treated by placing patients on the roof in the sunshine.

Observations by other local men have shown the comparative infrequency of sinusitis, mastoid infections, and the deeper respiratory infections associated with pertussis and influenza.

Records from the U. S. Bureau of Census of vital statistics for the last year (1932) show the following interesting and noteworthy facts: first, that the deaths per 100,000 population from lobar and bronchial pneumonia are only 48 in Florida as compared to 89 in New York state, 85 in Pennsylvania and 75 in Ohio, where the severer winter climates prevail; also that the death rate from whooping cough, which is frequently due to the complicating pneumonia, is 2 in Florida as compared with 4.6 in Pennsylvania and 5 in Ohio, or less than half as much as in the northern states. Data from the Florida State Board of Health for the year 1929, in which the state is divided into four districts—namely, northeast, northwest, southeast and southwest show that the death rate from pneumonia is lower in the southwest district than in any other in the state, being only a little more than half that in the northwestern district and that deaths from influenza are considerably less than one-half the number in the northwestern district. This would show the relative pneumonia mortality rate of our immediate section as compared to northern states even much better than shown by the above quoted data which refer to the state as a whole. This definite lowered mortality is unquestionably due to the direct bactericidal effect of sunshine together with the increased resistance produced by the solar rays.

These statistics further show that deaths from heart diseases are respectively as follows per 100,000 population: Florida 196, New York state 302, Pennsylvania 259, Ohio 235. Although our death rate from heart diseases is less than two-thirds of some of the states, we must consider the fact that literally thousands come here in old age, which makes it even higher than it would be under

normal circumstances. We therefore find the observations made, that our climate is especially beneficial to these chronic diseases, borne out by our government statistics.

In conclusion, we summarize the Florida climatic factors as follows: first, that due to the *availability* of sunshine with its resultant effect upon calcium metabolism, those diseases resulting from this deficiency, such as rickets, tetany, underdevelopment, dental caries, and many nervous diseases, are benefited markedly in this section; second, that by reason of the stimulating effect of ultra violet rays upon the defensive mechanism of the system and its reconstruction forces, all persons with chronic infections such as tuberculosis, especially of bones and joints, sinusitis, rheumatism, etc., are aided in overcoming their handicaps; third, that as a result of the known low mortality rate of influenza and pneumonia in Florida and also the favorable influence of our marine atmosphere upon chronic heart diseases, high blood pressure and nephritis, this is an ideal land for the aged and feeble, adding many years to their life expectancy.

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WORKMEN'S COMPENSATION LAW

NELSON M. BLACK, M.D.,
Miami.

Why is a progressive commonwealth like Florida one of the four States of the Union in which there is no Workmen's Compensation Act or Industrial Commission? In the opinion of the writer, the members of the medical profession of Florida are in part to blame, in that they have not, as a body, aided in securing passage of the bills which have been presented before the legislative bodies. Whether this is due to a lack of initiative or lack of interest in matters politic, or the proverbial proneness of medical men not to meddle with questions which they deem are outside of their own profession, or from modesty, or the fear that the industrial public will think they are interested in legislation that will aid them financially, is problematical.

Admitted for argument's sake that a sound Workmen's Compensation Law, properly administered by an Industrial Commission, will bring in additional revenue and one that will be assured; are the doctors the only ones to benefit? If we are idealists, even to a certain extent, in our practice (few of us practice medicine for our love of humanity) is not the fact that the benefits which accrue, not only to ourselves but to the disabled employee and his employer as well, in the States having a Workmen's Compensation Law, sufficient for us, as Doctors, to do our utmost to have such a law placed on the statute books of Florida?

The blame for the non-passage of former Workmen's Compensation Bills cannot be laid entirely to the doctors, however. The American Labor Legislation Review states: "The more intelligent citizens of Florida had hoped the Legislature would this year (1931) place the state among the 44 commonwealths which long ago discarded the inhuman and archaic system of suits for damages in personal injury cases. But they had underestimated the cupidity of their ambulance-chasing lawyers, the short-sightedness of their employers in the lumber and allied industries, and the ignorance of a large number of their representatives at Tallahassee. Upon the employers of the northern saw-mill counties of the state—especially upon the 'pepper-box' (small) manufacturers of wooden crates for fruits and vegetables—rests in this connection much of the responsibility for Florida's backwardness. But the Associated Industries must share the discredit for Florida's undesirable reputation outside the state among prospective investors and business men who hesitate to come in as long as Florida has no accident compensation law. Some of the local Chambers of Commerce have already protested this handicap and now favor modern legislation." Thus it will be seen that the heads of certain industries fight the passage largely because of the initial expense which will be incurred for the instalment of certain safety devices which will be required should a law be enacted. This attitude does not indicate a great degree of vision on the part of these individuals for it is a fact, admitted by the industries that fought the bills in many of the States now having adequate laws, that the saving in money formerly expended in fighting suits for compensation following injury has much more than paid for all safety devices required by law

to say nothing of the loss in production due to the former longer absence of the sick or injured employee from work.

Experience soon taught industry in the States which enacted laws that injuries are costly; that their prevention costs considerably less; but most important of all, that both accident frequency and severity is appreciably reduced. "Workmen's compensation laws have stimulated employers to the realization that the prevention of accidents is a cheaper and more satisfactory solution of the problem than the payment of accident benefits. It may truly be said that the economic motive for safety provisions received a decided impetus in the compensation legislation. This legislation for the first time placed a definite monetary value upon the more common injuries suffered by workmen in various types of employment. The employer, having been shown the probable cost for such injuries, was stimulated to reduce these costs by proper attention to accident prevention.

"Actual experience proved that it was not unusual for the frequency of accidents to drop from 75 to 85 per cent as a result of sustained and proper safety activities. The elimination of two-thirds of the severe accidents in industry has yielded enormous savings in insurance premiums and in life and limb."⁴

Wendell C. Heaton, President, Florida State Federation of Labor, sums up the benefits which will accrue to all concerned under a sound workmen's compensation act as follows:

"THE EMPLOYER BENEFITS

"Saves waste of time, energy, and annoyance of courts.

Risk and worry about exorbitant damage suit awards.

Good morale and good will of workers.

Safety appliance encouraged by law reduces accidents.

Also reduces insurance rates.

Saves lawyer fees and court costs.

No competitive advantage in favor of selfish, careless, indifferent, lowgrade employer as against a fair, generous employer who now incurs.

Does not lose a good worker when he is hurt by cause of animosities from damage suits.

Settlement does not need to be double the sum to workers to provide pay for damage suit lawyer.

Definite sum in budget to charge to overhead no uncertainty.

"THE EMPLOYEE BENEFITS

"Saves workers' lives, reduces number of injuries.

Saves lost days through illness from accidents.

Prompt medical and surgical aid saves life and lost time.

Prevents broken homes, humiliation of charity; preserves self-respect, better standard for children.

Insures modest living when accidents must come.

Retains job and induces home owning, by removing friction of law suits in case of accident.

"GENERAL COMMUNITY BENEFITS

"Saves economic loss, unrest and disturbance by reducing number of deaths and injuries to citizens.

Saves economic loss to doctors, grocers, hospitals, landlords, etc.

Saves taxpayers cost of litigations, industrial widows' pensions, etc.

Reduces cases in juvenile courts, dependency, delinquency.

Saves delay and cost in courts as damage suits are dragged to wear out plaintiff.

Reduces cost of welfare, fraternal, union, church, city and county relief to aid to industrial victims.

Makes possible much better relief work when industry bears its own burdens and industrial problems are met through industrial mediums."

The question naturally arises: Wherein and how does the medical man benefit?

"During the years of formative legislation on liability insurance and workmen's compensation, physicians in the United States showed but little interest in the movement that, within a generation, was to be a dominating influence in the practice of a considerable percentage of them. The laws were concerned almost exclusively with securing the legal right of the injured worker in some sort of financial relief during the period his injury prevented him from working.

"The medical care of the worker was looked upon only as a sort of first aid, and an inspection to determine the amount of the compensation. Some of the first compensation laws made no provision for medical care and the majority limited it to from 2 weeks to 30 days and the cost from \$25 to \$50. Manifestly, to the employers, insurance companies, and social workers who were responsible for this early legislation, the function of the physician in accident cases was

primarily that of an expert witness. From this attitude followed the whole chain of actions designed to control the choice of the physician by those interested in having his decisions in favor of small compensation. It was some time before it was realized that the period of disablement and, therefore, the amount of compensation, really depended far more upon the adequacy of medical care than on the bias of the medical testimony. When this was realized, there was a rush to increase the amount of medical care until today nearly half the jurisdictions place practically no limits on the time and money granted for this purpose. But the institutions and regulations derived from the stage when medical care was almost ignored and medical advice was desired, principally on financial questions, still remained.

"Today it is becoming evident that every phase of the administration of compensation rests for its success upon the skill of physicians and surgeons. Even the prevention of accidents, it is now gradually becoming recognized, is dependent more upon mental and physical examination, treatment, and placement of employes than upon mechanical safeguards, shop discipline and 'safety first crusades.' From the moment the accident occurs, medical care is all decisive. Medical judgment decides the extent of the injury and therefore the amount of the compensation, and the character of the medical care determines to a large extent the period of disability and finally the methods and time for rehabilitation.

"The medical phase of the work has increased until today between \$70,000,000 and \$80,000,000 are paid annually for medical and hospital care in compensation cases, a sum nearly twice as great as is paid to the physicians of Great Britain under a national health insurance system.

"The methods of giving medical care that have grown up around compensation are more significant than the amount of money expended. Because accident victims are often members of a large industrial group they form natural nuclei around which clinics, hospital associations and various forms of contract practice have crystallized and grown to dominating proportions in many localities. Since the ruling principle of these institutions is apt to be financial—economy in compensation and medical cost—to protect the profits of insurance companies and employers, there has been a tendency to introduce the most undesirable elements of commercialism into their medical relations.

"In some states chains of clinics have arisen

with salesmen who solicit custom for what official investigations have shown to be inferior service. Plant medical systems have been unduly stimulated by the profit motive of saving compensation payments rather than care for the patient. Recently these schemes have grown to include complete medical care, first of employes, then of their families and finally of entire communities.

"In many of the western states plant systems were supported by 'pay-roll check-offs' which were legalized by compensation legislation. In some states organizations with a force of salesmen have been formed to supply this service, resulting in extensive systems of competitive contract practice the results of which are measured more by the profits to the promoters than by effects on the health of the patients. These systems also have broken through the circles of industrial employes and their families to the general public. Physicians have had little to say in directing this development. The organization and administration of the law and the institutions for medical service that have grown out of it have been the work of laymen. The movement has now reached the point where in some sections those physicians who are engaged in compensation and industrial work have lost touch and sympathy with the great body of practitioners and also, to some extent, with the traditions and ideals of the medical profession.

"The whole compensation situation seems to be approaching a critical point in its evolution. Whether it will evolve into a lay controlled system of health insurance for the industrial population, administered commercially, or into a system of adequate professionally directed ethical care for the workers of this country, *depends very largely upon the extent to which physicians, through their medical societies, awake to the situation and act intelligently.*

"There is immediate and urgent need for medical representatives in the administration of compensation. This need has been recognized and demanded by lay legislative investigating committees and the National Industrial Conference Board, but has received little attention in most of the States from organized medicine.

"The question of the choice of physician is a vital one in every phase of the subject. Wisconsin and California have recently reached what appears to be a fairly satisfactory compromise in the creation of mutually selected local groups of competent physicians and surgeons within which the patient has free choice.

"The States where medical relations appear most satisfactory are those in which active committees of *State and local Medical Societies meet regularly with compensation administrations to discuss and settle disputed questions.*"³

Would it not be well for The Executive Committee, the Committee on Legislation and Public Policy, The Public Relations Committee and The Committee on Medical Economics of the Florida Medical Association to evidence some interest in the subject of Workmen's Compensation Legislation and formulate some plan to have the question discussed before the various county societies with a view of obtaining an expression of opinion as to the advantages of such legislation, and the means of presenting an united front by the medical profession of Florida to obtain the passage of a bill at the next session of the Legislature; the reports of the County Societies to be presented to the next meeting of the State Medical Association?

It is earnestly recommended that those interested in a Workmen's Compensation Law read:

1. The Economics of Industrial Medicine, by C. P. McCord, J.A.M.A., Apr. 9, 1932.
2. Reports, Symposium and Surveys under the Auspices of The Board of Traumatic Surgery, published by the American College of Surgeons, 1929.
3. Projected study on Workmen's Compensation, A. M. A. Bulletin, 1932.

These articles were freely quoted in the above article.

4. Medical Relations under Workmen's Compensation. (Report prepared by Bureau of Medical Economics, American Medical Association, 1933.)

GENERALIZED LYMPHADENOPATHY IN CHILDREN WITH THROAT INFECTIONS*

ALVYN W. WHITE, M.D.,
Pensacola.

The symptoms of throat infections in children are far more indefinite and varied than those found in the adult. The impression gained by reading a text book or the literature on this subject is sometimes misleading, for some of the most common findings of throat infections or acute upper respiratory infections are merely listed under symptoms or, in some cases, left out altogether. We all know that the text book pic-

*Read before the December, 1932, meeting of the Escambia County Medical Society, Pensacola.

ture in any condition is rare, but it is my opinion that throat infections in children diverse more than almost any other condition or infection.

The symptom of abdominal pain in throat infections, sometimes so severe as to simulate true appendicitis, has been recognized for some time. Struthers, Freeman, and Hutchison speak of such a pain which they attribute to a lymphadenitis of the mesenteric glands. Brennemann mentions this pain in connection with throat infections also, but hastens to add that appendicitis and throat infections can, and do, coexist. Nevertheless, it is not common to find an enlargement of the mesenteric glands during a laparotomy in children with symptoms of appendicitis, the appendix being normal or, at most, without enough pathology to account for the pain. There is usually an associated throat infection in these conditions. Granting that a mesenteric lymphadenitis is the cause of the abdominal pain in throat infections, and from recent observations we would seem justified in doing this, the question arises: Is the enlargement due to absorption from the intestinal tract or systemic? If systemic, could we not expect to find other glands affected? During the past several months, three cases have been seen which suggest the possibility of a generalized lymphadenopathy in connection with a throat infection.

Case No. 1:

J. P., age 3 years, female, was seen because of an enlarged cervical gland. She gave a history of a cold four or five days previous with a temperature around 102°. The temperature had been normal for the past two days. She was subject to frequent colds accompanied by enlarged cervical glands and pain in her abdomen. During this attack the glands under her right arm had become swollen and tender. Physical examination revealed a small undernourished, anemic-looking child. The temperature was 100°. The nasal mucous membranes were red and injected. The tonsils were large, red and cryptic. The post-pharynx was red, lungs and abdomen were negative. There was a slight systolic murmur at the base of the heart. The anterior and posterior cervical glands were enlarged to about walnut size, as were the inguinals. The axillary glands were enlarged on both sides, especially the right, which was about the size of a small lemon, red and tender. Laboratory findings were: urine, Von Pirquet and stools were negative, hemoglobin 60%; (T) total white cells count 17,000; Polys, 48%; small lymphocytes, 42%; eosino-

philia 6%. Diagnosis (1) acute nasopharyngitis; (2) general lymphadenopathy; (3) functional murmur.

The glands subsided under palliative treatment but at one time it seemed that the axillary might suppurate. Two months later I saw her with an acute infection of the throat, with temperature 103°. All the glands were again palpable, the right axilla being the largest. They again subsided in a few weeks. A tonsil and adenoid operation was suggested.

Case No. 2:

A negro boy, age 2 years, was seen because of an eye condition which seemed to be an obstruction of the tear-duct. He was also suffering from an acute cold with temperature 102°. The positive findings on physical examination were: large red and cryptic tonsils; the right ear drum was slightly red; palpable cervical glands. The inguinal and also the epitrochlears were enlarged. Here, too, the axillaries were affected, the right being the most prominent. Aside from the eye findings there was nothing else of interest. Laboratory findings: urine, many pus cells, trace of albumen, blood hemoglobin 80%; Polys. 60%; small lymphocytes 30%; large lymphocytes 2%; eosinophilia 8%. Stool, Von Pirquet, and Kahn were negative. Diagnosis (1) acute nasopharyngitis; (2) general lymphadenopathy; (3) acute pyelonephritis; (4) obstruction tear-duct probably congestive. The adenitis disappeared under palliative treatment.

Case No. 3:

M. W., age 3 years, female, was seen because of a persistently elevated temperature. One month before she was seen by me she had a temperature around 100° for about two weeks, with no physical findings to account for it. (Her father is a M.D.) Her temperature had been normal for the past week but had returned the day before coming to my office. Laboratory work at the time of her first temperature had consisted of a urinalysis, Widal blood count, test for para-typhoid and also melitensis which were all negative, or within normal limits. Physical examination revealed an undernourished girl, small for her age, and pale. The tonsils were embedded and red as were the surrounding structures. Chest negative. The liver was not palpable, but the spleen was palpable about 3 c.m. below the costal margin (her father states that this was not present at the beginning of her illness). The cervical glands were enlarged as were the axillary and the inguinal. A repeated

blood count was: hemoglobin 80% ; total white cell count 13,000 ; Polys 55% ; small lymphocytes 40% ; eosinophilia 2% ; large lymphocytes 3%. A Von Pirquet was negative. Diagnosis: acute nasopharyngitis with a general lymphadenopathy.

One month later she was seen again. She had had no temperature for the past three weeks, her glands had subsided and the spleen could not be felt. Tonsillectomy and adenoidectomy were advised.

Comment: Gerstley says, "Although in children adenopathy is most frequent in the cervical region, there is no reason why any node may not be affected." He suggests that Hodgkin's disease, leukemia, tuberculosis, and lues be ruled out and then a careful search be made for the foci. This was done in three cases presented and the only pathology found was in the throat except in case No. 2, which also had an eye infection. Eye infections may sometimes cause axillary enlargement, according to Gerstley. In this case, however, the left eye was affected and the right axillary gland was the largest. In case No. 3, the spleen was also enlarged. This is probably a part of the picture, for Lucas says, "It (the spleen) responds almost as readily to acute infections in infancy and childhood as do the lymphatic glands. The diagnosis of malnutrition was considered, for this frequently causes a general lymph enlargement. This might easily have fitted the other findings, but the glands subsided too rapidly, and in case No. 1 reappeared with an acute infection of the throat. Tuberculosis was ruled out by the clinical course and negative Von Pirquet tests. A blood count and a clinical course also eliminated leukemia and Hodgkin's disease. Acute glandular fever of Pfeiffer, which at best is an indefinite diagnosis, was brought to mind. Clara Davis, in reporting an epidemic, reports a marked increase in the white cell between 30,000 and 40,000 and also an increase in the small lymphs. This, however, is not always the case and I do not believe that glandular fever is any longer considered a clinical entity, but is now thought of as a nasopharyngitis in a lymphatic child.

Throat infections in children are common, but are at times interesting with the symptoms they present. Sometimes they are more than interesting when we are called upon to distinguish between abdominal pain caused by a throat infection, and true appendicitis. I cannot help but agree with Jos. Brennemann who, in a personal communication, says, "I have never given up the

possibilities of throat infections and the findings they may present."

CONCLUSIONS

1. Three cases of generalized lymphadenopathy in connection with throat infections are presented.
2. The possibility that the foci be in the throat is considered.
3. The differential diagnosis is discussed.
4. The similarity between the cases reported and so-called glandular fever is mentioned.

In place of acute nasopharyngitis, the term acute upper respiratory infection might be substituted. This would include any sinus involvement if any were present. I believe any infection of the upper respiratory tract might cause the findings reported.

It would have been interesting to follow these cases after tonsillectomy and adenoidectomy, but two of the patients moved away, and the third was not able to have an operation at this time. The most one could hope to expect following tonsillectomy and adenoidectomy would be probably less frequent respiratory attacks.

I had the pleasure of seeing some of the work done following Rosenau idea. We frequently found the same organism in the throat and appendix.

The only difference between the cases reported and acute glandular fever is the blood count. I wonder if the difference in amount of lymphatic involvement could account for this. It would seem possible in the cases reported and also in the so-called glandular fever of Pfeiffer that, as Gerstley says, we are dealing with an acute upper respiratory infection in a lymphatic child.

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DISCUSSION

Dr. J. M. Hoffman, Pensacola:

I feel that this subject deserves more attention than has been given to it. Some months ago it was found that lipiodol injected into the nasal accessory sinuses would appear in the bronchial lymph nodes after a short while. Surely, infec-

tious material can and will be absorbed in the same way. We are very prone to disregard upper respiratory tract infections because of the slowness in which they react to treatment. I feel that this matter which Dr. White has so ably brought to our attention should deserve our full consideration.

Dr. C. J. Heinberg, Pensacola:

I congratulate Dr. White on his able and timely presentation of this paper. Children between the ages of two and six years are prone to lymphatic hypertrophy which is easily exaggerated or aggravated by focal infection. It would have been interesting to follow these cases after operation to determine the benefit of operations, as in my practice this procedure does not always alleviate the entire condition, which, in my opinion, has a relation to avitaminoses and the growth hormone. It has often been my observation that patients who have had tonsillectomies have appendicitis within one year after operation. Rosenau, of the Mayo group, claims to have isolated the streptococcus from the tonsil and appendix: which work you may take at your own values. There is no reason why distant lymph nodes should not be affected by the systemic reactions of focal infection.

Dr. M. A. Lischkoff, Pensacola:

I agree with the author that children after tonsil and adenoid operations are often subject to adenopathy, secondary to systemic infection. Most cases ultimately clear up with proper treatment. I dislike the term nasopharyngitis in these cases, as many are an extension from the sinuses and recur as long as sinusitis exists. A few years ago, a number of otologists opened and drained mastoids in infants and young children to relieve systemic infection, in many cases of which showed little or no local symptoms, but this procedure is not as popular now as it was. I believe that systemic infections, particularly intestinal, are as important in these cases as the nose and throat.

TRANSURETHRAL RESECTION OF THE PROSTATE*

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Undoubtedly the treatment of prostatic hypertrophy is of great importance as evidenced by the success of prostatectomy, which during the last decade has been accepted by the profession as

well-nigh perfect. Just a few years back, Young, Caulk, McCarthy, Collings and others devised punches of different varieties, none of which proved any degree of success in other than the devisor's hands. In 1926 Maximilian Stern presented his ingenious instrument which he termed the Resectoscope. The mechanism of this Resectoscope, as well as the method of its technique, brought the dawn of a new day for transurethral instrumentation of the prostate gland. However, the early dawn did not begin to glow bright until the Miami meeting of the Southern Medical Association, November, 1929, where to the amazement of those assembled in the Urological Section of this meeting, a sterling doctor from Greenville, South Carolina, got up to discuss a paper on "Prostatectomy," and said that with the Sterns Resectoscope any prostate could be removed, thereby lessening the hazards of either a perineal or supra-pubic prostatectomy, and the hospital stay could be cut down to a few days rather than a few weeks. This South Carolina doctor was Theodore M. Davis.

There has been considerable argument back and forth about which is the better instrument in the resector group as well as which is the better electric current to be used. I have contented myself to stand by the panendoscopic system of vision as I was accustomed to this view and considered it far more clear than any other lens system so far advanced. For the cutting current I have followed Davis, as he is the one who worked out the Davis-Bovie Electro-Surgical Unit as put out by Liebel-Flarsheim, which has two separate units in one cabinet. The cutting current developed by this unit sections tissue with a minimum of hemorrhage as there is sufficient coagulation during the loop excursion to control all vessels if the movement of the pinion is properly timed. Should hemorrhage arise it is a degree of lasting satisfaction not easily explained by the operator to change to the coagulation current and with the slightest touch of your loop with your foot on the switch seal the bleeder and immediately your hemorrhagic point is sealed tight and the irrigation fluid returns clear.

We are all quite agreed that the same careful preoperative and post-operative care of these patients as worked out for prostatectomy are essential before and after resection. It will still be necessary to do cystotomy in a certain number of cases where the patients first seek aid when acute urinary retention ensues. However, this does not mean that enucleation is the necessary

*Read before the Escambia County Medical Society, Pensacola, Florida, November 14, 1933.

second step to follow. Likewise, if the prostatic enlargement is complicated by vesicle calculi or the prostate is one of the very large intra-vesicular type, a cystotomy will in most cases present itself as being necessary. Resection in these cases can be performed under the most ideal conditions, following several days or even weeks of drainage accompanied by more or less shrinkage of the prostate. These points should bring us to the realization that if we are to reserve for our patients a brevity of hospitalization together with further economical betterment we should early recognize the obstructive manifestations of prostatic obstruction, and see to it that they are corrected at their incipency.

Caudal and trans-sacral block is the form of anesthesia used in our series of cases. In our observation of other operators who use different modes of anesthesia we see no need for change. After the patient receives the anesthetic he is placed in the regular cystoscopic position, properly draped and the indifferent electrode of tin-foil plate, which is well lubricated with lubricating jelly, placed under buttocks and properly connected. A 28 F. sound is passed before introducing the resectoscope sheath. Should this pass with difficulty, a 31 F. sound is passed, this in order for the resectoscope sheath to indwell within the urethra with a great amount of lubricating jelly surrounding it, aside from it passing easily. The bladder is irrigated through the sheath after removing the obturator until the fluid returns clear; then the working element is introduced. The active terminal of the generator is attached to the proper connection on the working element; the light conducting cord and water are connected. A visual inspection of the vesicle orifice and posterior urethra are now made, determining the amount of tissue to be removed, also whether the initial resection is to be made from the median or one of the lateral lobes. After each resection stroke, the gutter thus formed is observed for the presence or absence of hemorrhage as it is best to control hemorrhage as you go, thus keeping your field of vision clear. It has been my experience that some of the prostates bleed very little during resection; others bleed profusely with every stroke of the loop. This is best explained by the fact that the degree of inflammation and edema present is more or less marked in all cases of prostatic enlargement except those frankly falling into the classes of bars and contractures.

After each section the working parts are re-

moved from the sheath, first cutting the irrigation fluid off. Thus, the tissue resected is brought out with the loop assisted by the outward flow of the fluid within the bladder. This tissue is easily shaken off or an assistant removes it with thumb forceps. The working parts are replaced, hemorrhage controlled if present, and you continue likewise to make additional sections until the operation is completed.

In bars and contracted vesicle necks, sufficient parallel sections are made in the floor of the vesicle orifice to completely remove the obstruction. In lateral lobes with the encroachment upon the urethra, sections are made in a continuous line beginning at the vesicle orifice. The succeeding section is made having the proximal edge of the preceding section in view at the distal edge of the fenestrum, remembering, however, that about one inch of tissue is removed in each section. This is continued until the obstructing tissue in the particular lobe you are working on is completely removed. The opposite lobe is then treated in a similar way. Then remove any bar or median lobe until the floor of the urethra is on a level or below the plane leading from the verumontanum to the trigone, being careful to keep all of the anterior points of resection shifts distal to the verumontanum. With the panendoscopic vision these points are easily ascertained at any stage of the resection.

When all of the obstructing tissue has been removed, and this varies in different cases, the entire area is inspected for bleeding and all bleeding points which are found are arrested by coagulation. Hemorrhage is much easier controlled as you go along, and double-checked as you finish resection than at any later time or place. When the field is clear and the irrigating fluid returns as sparkling as it enters the bladder, then, and not until then, have you reached the point of placing a catheter within the bladder and removing the sheath.

The size of the indwelling post-operative catheter is a disputed point, but to my mind they are all foreign bodies, and the one which will give you the best drainage is the one to be elected. The normal urethra is 28 F. in size, so it matters little whether the catheter is a small one as advocated by some (16 F.) or a large one (23 F.) as advocated by others. I use the 23 F. because it is the largest one I can introduce through the fenestra of the sheath of the resectoscope, believing it gives me better drainage. This is fastened within the urethra with adhesive strips and con-

nected to a container under the bed or a urinal within the bed. This catheter is removed after forty-eight or seventy-two hours thereby giving the patient's bladder complete rest. Upon removal of the catheter the patient voids a free forceful stream in keeping with his bladder tone.

All operators are familiar with the cases where the patient came in with complete retention and got well with just a supra-pubic drainage of the two-stage operation. In these cases the prostate diminished in size with the drainage and the removal of the residual urine. This same shrinkage has been described by Caulk in his punch operation and by Davis in his resections, being brought about by promoting adequate drainage by removal of obstructing tissue at the vesical orifice and posterior urethra.

The fundamental principles involved in transurethral resection of the prostate are (a) to properly prepare these patients by thorough decompression with a retention catheter, stabilizing the kidney function within normal limits, and maintaining a careful watch over the nitrogenous content of the blood; (b) the removal of obstructing tissue at the vesical orifice, either by resection or coagulation, or a combination of these; (c) the absolute control of hemorrhage; (d) post-operative care, giving appropriate consideration to any constitutional abnormalities present.

In these cases there are the usual complications concomitant with age and obstruction in the urinary tract. The only death I have to report is of a man, aged 70, who came in with a urinary frequency of every fifteen minutes for two weeks. Urine showed an occasional pus cell with a specific gravity of 1.022, being negative otherwise. A small median bar was found and was easily resected; no hemorrhage was present during or after resection. The catheter was removed 72 hours post-operative and the patient voided a bold free stream with mental and physical ease. On the eighth day paralytic ileus developed, cutting off his power to void which necessitated reintroduction of retention catheter. I was unable to cope with the ileus and the patient died on the eleventh postoperative day.

It is frequently surprising to note the small amount of tissue encroaching in patients with complete retention. It is also surprising to note how much more tissue you remove in the second resection in cases where the first resection was followed by days or weeks of free voiding to be followed by difficult urination to a greater degree than when the patient first sought relief. This

is caused by resecting the capsules of the lateral lobes which is fibrous tissue, thus allowing them to protrude within the urethra to a greater degree than when surrounded by the capsule. Such cases are in proportion to the amount of experience we have had with resection. Should a second resection prove necessary in a few of your cases, the shock of two resections is far less than either step of the former two-step operation. This connected with a much shorter and comfortable hospital stay loudly proclaim the benefits of resection.

The normal prostate gland weighs from 20 to 30 gm. In an enlargement of the prostate it is only necessary to remove that portion of the gland which causes obstruction, and as some of the enlargement is back into the portion toward the rectum, all of the enlargement above normal is not necessarily to be removed. In small fibrotic bars, the only tissue necessary to remove may be as small as 1.5 gm. though the large adenomatous types with a grade four inflammation, may require as much tissue removed as 45 gm. As time goes on and we see these patients earlier as a result of simpler methods of treatment, the amount of obstructing tissue will swing to the smaller amounts of tissue rather than the larger amounts just as the uterine fibroids diminished in size during the last decade.

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The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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SOME PHASES OF MEDICAL ECONOMICS

The considerations given by the medical profession to medical economics during the last few decades have been disproportionate to the advances made in scientific medicine. Although medical economics has always been a part of medicine, not until recently has this subject been given the attention it deserves. Not long ago, it was thought to be unethical to discuss any phases of medicine which had to do with business or economic questions. At present, there are nearly 150 medical economics committees in state and county medical societies throughout the United States. It is now recognized that medical economics is not only a proper but also a necessary phase of medical organization activities.

The responsibility of developing a medical economics program is usually placed upon the members of a committee. An energetic committee on medical economics cannot accomplish all that is desired in this field if the medical society membership remains indifferent to and ignorant of these questions. Therefore, each physician should become sufficiently informed about the principles involved in medical economics and the details of specific economic problems so that he may at least think and speak intelligently upon these subjects.

Before appropriate solutions for the problems in medical economics can be proposed, it is necessary that certain broad principles be established. Unfortunately, the writings of economists and the libraries of works on general economics fail to provide the medical profession with any orderly discussion or statement of principles which apply to the practice of medicine. Because of this lack of information, it was necessary for the Bureau of Medical Economics to set down in a publication entitled "An Introduction to Medical Economics" the principles which were considered essential in any study of medical problems. For the first time, this represents an attempt to differentiate the principles which apply to the professions from those which apply to the general economics of industry, business and commerce.

An enumeration of a few subjects will suffice to show the importance of medical economics and at the same time suggest some of the activities which state and county medical societies may properly study. This is only a partial list and is not intended to enumerate the subjects in the order of their importance.

1. Care of the indigent sick.
2. Health and accident insurance practice.
3. Contract practice.
4. Sickness insurance.
5. Workmen's compensation.
6. Health Department and school health practice.
7. Clinic and hospital abuses.

In approaching the study of any phase of medical economics, it is not only desirable but essential that these studies be conducted with complete fairness and open-mindedness on the part of the investigators. The committee and individuals who are charged with the investigation of medical economics must refrain from carrying to their work any degree of bias, preconceived opinions, prejudice or antagonism. It is only by the elimination of these factors, which so frequently influence the results of social studies, that conclusions and recommendations will be valuable and enduring.

The objects for which studies on medical economics are conducted are:

1. To preserve that type of medical practice which is best suited to protect the public welfare.
2. To preserve and maintain the practice of medicine as a profession.
3. To suggest new and legitimate channels for the individual practice of medicine.
4. To correct abuses of and dangerous or destructive tendencies in the practice of medicine if and when they are discovered.

The primary objective should always be to maintain a high quality of medical service to the public. Any inferences or procedures which have as their objective the increase of professional income must always be made secondary to the quality of medical service and the integrity of the profession as a group.

The medical profession has no desire or intention to oppose safe, sane and ethical methods of providing good medical care to the public at a price it can afford to pay. During the past few years, much has been said and written about the quality and quantity of medical service available to the so-called low income classes. As yet no reliable information has been produced to show that the medical profession has actually neglected or refused to treat these low income classes because of their inability to pay. During periods of economic stress, there is always an abundance of plans to cure every economic ill. Each plan, in the minds of its proponents, is the panacea for

the ills for which it is designed to relieve. During the last few years the medical profession has been bombarded from all sides with proposals to alter the type of medical care that has stood the test of thousands of years. There are in the Bureau of Medical Economics more than 530 of such schemes which are either in operation or are merely hastily conceived impractical proposals. It is urged upon the medical profession that if it does not produce a plan of some sort, politicians or laymen or the state will surely impose some method upon the medical profession to provide care for these low income individuals.

I am of the opinion that statements of this kind and plans such as those to which reference has been made above are sure to result in a deterioration of medical service and a destructive influence upon the medical profession if they are accepted and placed in operation without the most careful scrutiny. Social change is never justified unless the new practices which such a change introduces are superior to those which it supplants. Even during a period of economic unrest we are not justified in making changes solely for the sake of being busy. It has required thousands of years to establish the social values represented in the individual private practice of medicine as we know it today and a tremendous responsibility is assumed whenever changes in that system of medical practice are proposed or made. In order that the essential values in medicine be retained, it is necessary that individual physicians as well as state and county medical societies resist every effort on the part of those who are seeking to control the practice of medicine for a profit.

This brief statement of some of the forces operating in medical economics today should make obvious the importance of the subject to both individual physicians and medical societies. I believe it is reasonable to suggest that the medical profession bring into the study and solution of medical economics questions a method that has characterized the scientific phase of medicine for so many hundreds of years, namely, that every fair and careful method be used first to study these issues for the purpose of determining the medical economic diagnosis, and then to apply the appropriate corrective measures, according to the requirements of the specific problem.

R. G. LELAND, M.D.,

Director, Bureau of Medical Economics, A. M. A.

RADIO BROADCASTS, 1932-33

The following broadcasts were arranged by the Public Relations Committee of the Florida Medical Association and given over station WRUF, Gainesville:

PROGRESS OF MEDICINE—FIRST THIRD OF TWENTIETH CENTURY*

H. C. DOZIER, M.D.,
Ocala.

Sir William Osler, whom all Americans know, states that: "Medicine arose out of a primal sympathy for man, out of a desire to help those in sorrow, need and sickness." There are medical records of disease and treatments that have come down from two and three thousand years before Christ, from the ancient Empires of Babylon and Assyria. These countries were apparently the beginners in accumulating medical information. However, it was not until about 400 years before Christ that medical lore was accumulated as a whole and put into form for the use of physicians. Hippocrates, a Greek physician, accomplished this, and because of it, has since been known as the "Father of Medicine."

Since those distant days, medicine, as a science and as a profession, has undergone constant change in its increasing efforts to discover the truth, as to the cause of disease, thus to be able to combat it on a rational and scientific basis. The far-reaching discoveries of Pasteur, in the century just preceding our times, entirely changed the conception of the then scientific world as to the spontaneous generation of life in sterile matter, led to the discovery of "germs," and later to the discovery that certain diseases were directly caused by the presence of specific germs. Some of you have recently heard on this Florida Medical Association radio program over WRUF an interesting discussion of the life and work of Pasteur, and two weeks later another on fermentation, so I shall not repeat. To any of my listeners, who did not hear these talks, I would say that you would do well to read the life of this grand man of science. In it you will find a fascinating story, that bears very intimately and directly on the everyday life of each of us living in the world today.

Pasteur's discoveries enabled Lister, an eminent English surgeon, to explain the terrific infections that followed all surgical operations of

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, March 19, 1933.

his day, by discovery of germs in the pus and discharge from wounds. Before the discovery that pus germs were the causes of infections, it was the rule for 85% of those operated upon to die, and all were infected. Lord Lister began the era of antiseptic surgery. This was an effort to kill the germs in the wounds by the use of strong antiseptics. As various medical scientists advanced in knowledge, it was found that by keeping germs out of all wounds, there would be no infections at all, and so as late as 1895 began the era of aseptic, or clean, surgery. It does not require a scientist to appreciate the enormous value to us today of this discovery of Pasteur, and the medical scientists who have followed him in developing and broadening the practical application of this study of germs.

Can you visualize in your imagination the value of scientific medicine to us who live today? Smallpox, diphtheria, yellow fever, malaria, plague, sleeping sickness, typhoid fever are no longer feared. Vast areas have been opened up through the application of modern sanitary engineering skill, and made habitable for the happiness, the economic and social development, of our people.

What a contrast is the modern hospital and operating rooms of today, to those in use before science knew that germs were the cause of infections! Aseptic surgery—clean surgery—those are magic words. Instead of the surgeon wearing an old leather apron, with his sleeves rolled up, and with his bare hands operating upon a patient who is held down by main force, (for this was before the days of anesthetics), the modern surgeon and his assistants, in a modern hospital, have scrubbed their hands with soap, water and alcohol, have donned caps, gowns, and masks which are clean and sterilized by steam under pressure, (as are the sheets, towels, and other draperies placed over the patient). The site of the operation on the patient has also been scrubbed with soap, water, iodine, and alcohol or other equally effective chemicals. This is all done to prevent contamination, by effectively precluding the entrance of germs into or around the field of the operation, thus making operations safe and possible in any part of the human body. This is a great boon to humanity and makes possible the saving of countless lives from diseases and accidents which otherwise would be impossible. You are all familiar with appendicitis which was first operated upon as late as 1884, and know the safety of such an operation when done early.

Formerly, old death certificates gave as causes of death in abdominal conditions, such terms for the diagnosis as "colic," "congested bowels," etc. Such general terms are seldom used now because, through modern methods of diagnosis, such as the x-ray, blood chemistry, and other advances of medical science the surgeon is able to definitely diagnose the seat of the trouble and then institute the proper treatment.

Not only in surgery, but in the control of many diseases, are seen the benefits enjoyed by those of us living in the first third of the twentieth century. It is no longer necessary that any one have smallpox, (there has not been a single case of smallpox in Czecho-Slovakia in the last five years, because of compulsory vaccination efficiently enforced), or diphtheria. Diphtheria antitoxin is a positive cure for diphtheria, if administered early in sufficient doses, and diphtheria-toxoid will give a lifetime immunity in 90 or 95% of the cases, if given to children at the ages of 6 months to 10 years, the ages at which they are most susceptible to this disease. Typhoid fever would be unknown if proper sanitary measures were practiced by individuals and communities, and if everyone took the typhoid vaccine. The history of typhoid among the much larger number of the soldiers during the World War is in marked contrast with the history of the same disease among the soldiers of the Spanish-American War. This is probably known to you, and is a glorious monument to medical science in the control of this disease.

Time is too short to go into any further detail with reference to many other diseases which have been conquered. The brilliant discovery of Insulin is just another example, and its benefits are well known by those who are unfortunate enough to suffer from diabetes. The x-ray is another that I must just mention in passing. It is called the roentgen-ray in honor of Professor Roentgen, who was the discoverer of x-ray. It was a marvelous discovery which dates back only to the early years of this century. It has made possible the examination of the body, inside and out, by taking photographs of it in part or whole. It permits the location of foreign bodies, the examination of broken bones, and is of marked benefit in the treatment of cancer and other tumors, as well as various skin diseases. The discovery of vitamins A, B, C, D, and E has been a blessing to those suffering with pellagra, beri-beri, scurvy, and rickets.

The standardization of medical schools in the last 25 years has made possible the better and more thorough education of doctors in the wonderful advances of the science of medicine. The work of the American College of Surgeons in the grading of hospitals is something that should be known and appreciated by every citizen of this country. Today a Grade A hospital is a safe place in which to be sick, because the American College of Surgeons would not so grade any hospital unless it had a competent staff, proper records, and all the other facilities for the proper diagnosis and treatment of the sick or injured.

Now what is the practical application of all the advances in medical science, about which I have been speaking to you, and how are they to be available to society, and to us as individuals?

While President, Mr. Theodore Roosevelt appointed a "Conservation Committee," and it made a report on National Vitality in 1909. This report showed that by the reasonable application of scientific knowledge at least 15 years could be added to the average lifetime. It was also concluded that at least 40% of American mortality (or causes of death) was preventable or postponable; that there were constantly three million people ill in this country; and that some 50% of this illness was preventable. Since this report was issued in 1909, thirteen years have actually been added to the expectation of life. The death rate from typhoid has been cut 75%, and the death rate from tuberculosis has been reduced 50%.

It is quite interesting to note the experience of many of our large life insurance companies (more than 40 in all) in their program of health education and periodic health examinations, offered to their policyholders. One large insurance company made a thorough analysis of its policyholders who had been examined, covering a nine-year period. It was found that there was a reduction of 27% in mortality among the whole group examined, and an 18% reduction in the death rate exhibited by their policyholders of the same class who were not periodically examined. Another company, covering the years 1914 to 1925, showed a reduction in the death rate among policyholders examined periodically, as compared to those not examined, of 23%. Thus we see that an occasional check-up on one's health offers handsome dividends in increased length of life to those individuals who will avail themselves of a health examination at regular intervals.

Let us remember this also, that no matter how much we, as individuals, attempt to care for our own health we will find it almost impossible to avoid diseases without the organized help of the city, county and state in which we live. Man may avail himself of the benefits of scientific knowledge through health examinations; he may live in accordance with all the rules of health; he may be immunized against the preventable diseases but if the city in which he lives has no good air for him to breathe; if the city's water supply is contaminated; if neighboring malarial swamps are not drained or covered with oil to prevent the breeding of mosquitoes; if flies alight on the food before it comes to his own home; if the food contains disease germs or dangerous preservatives; or if his neighbors or friends visit his own home and spread infections; all his mere personal efforts will not be adequate.

It is therefore incumbent on each individual to contribute his share to the hygienic work of society as a whole, in particular, to take an active interest in not only his own health, but his City's and his State's health, and to manifest interest in health legislation and its administration.

The Florida Medical Association has been glad to review for you the marvelous achievements of scientific medicine, covering mostly the first third of this, the twentieth century, and to contrast for you the many advantages that are available to you which were not enjoyed by your forefathers—even your grandfathers, in many instances. This Association hopes that it has stimulated your interest not only in individual health, but community health; and that through your cooperation more people will learn to appreciate the achievements of medical science and avail themselves of its many benefits.

WHAT WE INHERIT*

T. Z. CASON, M.D.,
Jacksonville.

Few subjects, perhaps, have as much appeal for the entire human race, educated and illiterate alike, as what we inherit. At the same time, there are but few subjects wherein science has made so profound a study and about which we know so much, yet so little. The physician in his search for the cause of disease has added considerably to the science of genetics. The carefully taken

*Broadcast delivered under auspices of Florida Medical Association over Station WRUF, Gainesville, April 2, 1933.

family history, though apparently stereotyped, is a part of this accumulated knowledge in the quest for the exact truth. It may be that a recognition of genetic principles will become the chief factor in the elimination of the physically unfit, whom modern medicine is tending to preserve.

Our belief in what we inherit is almost as well diffused as our belief in what is lucky or unlucky—and in many instances the scientific basis is as accurate. Every effort will be made in this talk to confine the statements to established principles of genetics and to those laws of inheritance which have been accepted by recognized students of the science of biology.

In human beings, as in all high organisms, the beginning of life is in the single cell containing a single nucleus. This single cell—a fertilized ovum—is the result of the union of two particles, each coming from a pre-existent individual, a parent. A complicated division of this cell finally produces the new animal, resembling the parents, whether it be man or a lower order. The single cell contains many minute particles. Each parent gives to this cell one set or chain of these particles which are paired in the new organism. It is their behavior, their interaction toward each other, that determines the kind of individual the cell will finally become.

To these have been given the name of genes. Except in the rare instances of identical twins, no two sets are arranged in the cell or in their relation to each other exactly the same. The disposition of these genes within the cell and the approximation of the particles in one set toward those in the other determine the actual type of person the cell will produce, whether precocious or feeble-minded, lazy or smart, or other qualities peculiar to each individual. The multitude of genes has each a distinctive substance, having a definite function, a particular work to do in producing the new individual. A loss or change in a single gene will alter the character of the individual, his temperament, size, color of eyes, etc.

Each parent gives to the offspring a set of genes. The offspring is, therefore, actually the result of the blending of two different individuals. The genes are grouped together in long bead-like arrangements known as chromosomes. These strings have separate segments each containing many genes. These with their included genes actually form the nucleus of the new cell. Man is known to have 48 chromosomes or 24 pair. In the male, one pair is unmatched and

designated as x or y. The corresponding pair in the female is matched and is known as xx.

The chromosomes can be readily seen under the microscope. While time will not permit their further consideration, it must be stated that the chromosomes of the male and female can each be identified, thus making it possible to establish the sex by an examination of the chromosomes. The establishment of this fact has led to the solution of many problems relative to what we inherit and how.

Let me quote from the "Biological Basis of Human Nature" by Jennings: "Fertilization occurs by the union of a sperm with an ovum. When a sperm bearing an x-chromosome unites with an ovum (also bearing an x) the resulting fertilized egg has, of course, two x's. It therefore develops into a female individual. But when a sperm having no x (though in some sperms bearing a y) unites with an ovum the resulting fertilized egg has but one x (with or without a y); it therefore develops into a male. The x-chromosomes of a father always pass to his daughters, never to his sons; also a son always gets his single x-chromosome exclusively from his mother, never from his father." It is therefore possible to trace the different characteristics from generation to generation by means of the x-chromosomes. It is impossible to understand the so-called laws of heredity or to attempt a study of their effect without a definite knowledge of the genes, the genetic system. Human genetics cannot be studied experimentally in the laboratory as in the case of other animals. Because of this limitation many inferences have been drawn and rash generalizations made regarding human genetics, and the significance of outside factors in determining social behavior of groups.

As physicians we are most concerned with gene substitution in producing human pathology while society is particularly interested in gene selection and its effect on the social group. To quote from Lancelot Hogben: "Hereditary diseases conform qualitatively to the assumption which is manifest in the heterogeneous condition. It is more commonly stated that the condition is determined by the dominant gene."

Perhaps the two best known diseases satisfying the quantitative requirements of the Mendelian hypothesis are diabetes insipidus and brachydactylia. The former, though not to be confused with diabetes mellitus, frequently called sugar diabetes, is too generally known to require de-

scription. The second condition is evidenced by the absence of the middle phalanx of the fingers. Retinitis pigmentosa and congenital stationary night blindness are similarly inherited though because of their relative infrequency little is known of them. In the case of the former, which frequently causes blindness before 40 years of age, those who die younger would not be diagnosed.

The accumulated evidence indicates that allergic diseases, of which asthma and hay fever are examples, are inherited. These diseases, which are interchangeable in their incidence, are believed by those members of the medical profession who are particularly interested in this condition to comply with Mendel's law of inheritance.

Those disease traits which are determined by recessive genes possess relatively greater theoretical interest and in cases where they are present the parents are practically always heterogeneous—in other words, both parents will apparently be normal.

In the case of albinism where many data have been collected, the method of transmission is not known. Though there is an excess of males over females, there is no clear evidence that Nasse's law is complied with. Hemophilia, however, follows this law, wherein the condition, though transmitted through the female line, affects only the male.

Laboratory experimental work in heredity, though accurate and apparently conclusive as far as the lower animal is concerned, is not necessarily applicable to man. Despite the brilliant work of Dr. Maude Sligh pertaining to the relation of cancer and inheritance in mice, there seems no basis for placing human beings in the same category. Nor does she so claim. To quote Dr. Jennings again: "There is no reason to suppose that there are any human beings who are predestined to develop cancer, whatever the conditions. . . . It is probable that there is no disease whatever, acute or chronic, infectious or non-infectious, whose occurrence is not influenced by the nature of the individual's genetic constitution . . . that even though a hereditary or genetic basis exist for a defect or a disease, that defect or disease need not actually come into existence. . . . What the individual inherits is a constitution that under certain conditions will produce the disease; under others it may not."

Blood transfusion, which until recent years was accompanied by the gravest danger, is today a

common operation performed with impunity. The danger is due to the clumping of the red corpuscles when blood serum from another person is introduced into the blood stream. This is due to the agglutinin in the serum and the agglutinogens in the corpuscles neither of which may be the same in two individuals. All human beings are typed into four groups. The reaction of each group toward the other three is known. The result of matings of any two groups has been established. By this means, it may be possible to identify the parentage of a child about which there is uncertainty. However, if both parents and the supposed parents should belong to the blood type required to produce the group to which the child belongs, the identification could not be made. The subject of blood types still affords a fertile field for extended investigation from which should result information greatly aiding in the determination of genetic influence. Of interest in passing is the comparative uniformity in percentages of the different group types. For example, from a thousand tests made by Snyder in this country, there were 45% in Group I, 42% in Group II, 10% in Group III, and 3% in Group IV. The findings of this sampling are considered typical.

There is no apparent biological reason to attribute differences in social behavior to hereditary transmission among those of normal intelligence. With regard to mentally defective less is known concerning the genetic factors attributable to them than to the physical variables. Because of the demonstrable effect of environment in producing the mentally defective, and the discrepancy in numerical ratios required by the Mendelian hypothesis, it is an established fact that more accurate and more comprehensive methods of study must be devised before conclusions of much value can be drawn.

Heron, who made a study of the relatives of the inmates of asylums, carefully tabulating the results, concludes: "No argument in favor of Mendelism seems possible on these figures." It is clearly established, however, "that the incidence of cousin marriages in parents of insane persons is definitely higher than in any section of the general population." This is particularly applicable to juvenile amaurotic idiocy, about which much accurate scientific information has been accumulated. This disorder is of extreme recessive type yet if the marriage of blood relatives were prohibited by law, this disease would

be reduced by 75%. It is one of the few conditions wherein the rigid observance of known genetic requirements would result in its complete elimination from the race. If no other condition were known this would be sufficient proof that close inbreeding is harmful. At present, however, too little is known concerning genetic selection to formulate any policy either in *theory* or *legally* that would be *comprehensive* and *humanitarian* in scope or *predictable* in results.

Conclusions from what has been said seem warranted: Too little is known concerning human genetics and that little knowledge is poorly disseminated. Life springs from a single—a fertilized—ovum which has been carefully analyzed. This cell contains a nucleus in which are particles called genes which are in groups and chains called chromosomes. Genetic factors causing physical variables in human beings have been proven in but few diseases. In insanity and dementia, genetic influence has not been proven to be a direct cause. The effect of environment on known hereditary conditions is too patent a factor to permit any prediction as to the final development of the cell, either physical or mental.

STATE NEWS ITEMS

Dr. R. L. Hughes of Bartow was recently appointed by Governor Sholtz as a member of the State Board of Health. Dr. Hughes' appointment was to fill the vacancy caused by the resignation of Dr. Leland Dame of Inverness. Dr. Dame has accepted the position of district medical officer in the Inverness district under the State Board of Health.

* * *

Dr. Stephen Gyland, who for four years has been in charge of the Medical Department of the American Cyanamid Company at Brewster, has resigned from that position and will move to Tampa in the very near future where he will open offices.

* * *

Dr. Harry C. Galey of Key West has been appointed by President Rowlett as necrologist for the twentieth councilor district. Dr. Galey succeeds Dr. George R. Plummer who died on December 31.

* * *

Dr. Henry E. Palmer of Tallahassee was elected president of the S. A. L. Railway Surgeons' Association at its annual meeting held in St. Petersburg, December 5, 6, and 7.

The 1934 annual Clinical Congress of the American College of Surgeons will be held in Boston, October 15 to 19.

* * *

Dr. J. C. Davis of Quincy attended the meeting of the Seaboard Surgeons in St. Petersburg the early part of December.

* * *

Dr. Frank W. Foxworthy of Miami announces the removal of his offices to The Bastian Building, 835 Lincoln Road, Miami Beach.

* * *

Dr. J. D. Bell of Pensacola recently returned from Chicago where he took special work in the Chicago Lying-In Hospital. He is now specializing in obstetrics at Pensacola.

* * *

Licenses have been granted by the State Board of Medical Examiners to the following doctors who passed the examination held at Jacksonville, November 13 and 14, 1933:

C. A. Adams, Jr., Trenton.
Ismael A. Alvarez, Tampa.
Roger J. Arango, Tampa.
Guy O. Brewster, Sebring.
Randall G. Brown, Garfield, Ga.
Van W. Burns, Jasper.
John F. Busey, Jr., Carrabelle.
Edward M. Coleman, Groveland.
Carl G. Dunst, Milwaukee, Wis.
Americo J. Ferlita, Tampa.
Elias Freidus, Long Beach, N. Y.
Thomas L. Glennan, Bartow.
Theodore F. Hahn, Jr., South Jacksonville.
Sage Harper, Miami.
William G. Harrison, Jr., Birmingham, Ala.
W. H. Hoskins, Miami.
Jean B. Jones, Petersburg, Va.
Joseph O. Keezel, Winter Park.
Paul Kells, Miami.
Joseph B. Koller, Vero Beach.
Ernest J. Larson, Underwood, N. Dak.
Thomas H. Lipscomb, Jacksonville.
Clarence W. Lynn, Orlando.
Maurice Markel, Braddock, Pa.
Arthur S. McCallum, Sanford.
Reuben L. McDaniel, Jacksonville.
James K. McShane, Miami Beach.
A. M. Melvin, Coral Gables.
Manuel A. Perez, Jacksonville.
Edward W. Pinkham, Sarasota.
George S. Reiss, Long Beach, N. Y.
Joseph Rose, Olustee.
Juan S. Sainz, Tampa.
Wiley M. Sams, Miami Beach.
Joseph D. Scolaro, Tampa.
James B. Stapleton, Bloxham.
Frank B. Voris, Miami.
Frank M. Wattles, Jacksonville.
Allen C. Winters, DeLand.
Burnett W. Wright, Los Angeles, Calif.

* * *

The many friends of Dr. S. A. Clark of Lakeland will be glad to learn that he is rapidly recovering from his recent appendicitis operation.

Dr. J. C. Davis of Quincy was guest speaker at the Thomas County Medical Society, Thomasville, Georgia, on December 15. The subject presented was "Primary Lung Cancer."

THOMAS D. GUNTER

Dr. Thomas D. Gunter, one of West Palm Beach's leading physicians, was born at Starke, Florida, July 13, 1873, and died at West Palm Beach, Florida, December 25, 1933. He attended the University of Georgia Medical College, from which he graduated in 1906. After graduation he located in Starke, Florida, where he practiced his profession for several years, moving to Stuart, Florida, for two years, hence to West Palm Beach, Florida, in 1918. In 1923 he was appointed county physician, which position he held until his death.

Dr. Gunter was a member of the Staff of the Good Samaritan Hospital, the Palm Beach Medical Society, the Florida Medical Association, and the American Medical Association. He is survived by his widow, Mrs. Ora Gunter, and two children, Fred Gunter and Nellie Gunter.

The following resolution was passed by the Palm Beach County Medical Society at its regular meeting held December 26, 1933.

Whereas, we, the members of the Palm Beach County Medical Society, feel deeply the loss of our brother and former president of this Society, and

Whereas, his high ideals and valued counsels, the result of years of conscientious effort, will be greatly missed by our members; therefore be it

Resolved, That the members of the Palm Beach County Medical Society express their sorrow in the passing of Dr. Gunter; that a copy of this resolution be entered on the minutes of this Society; that a copy be sent to the members of his family and that the same be published in the Journal of the Florida Medical Association and in the local press.

EMORY WILLIS PEERY

Dr. Emory Willis Peery, 66, eye, ear, nose and throat specialist of West Palm Beach, died December 4, 1933, after an illness of many months. Dr. Peery was born in Burks Garden, Va., September 1, 1866. He received his medical education from the University of Maryland and took

post-graduate work at the University of Pennsylvania, the Philadelphia Polyclinic, Wills Eye Hospital, Philadelphia, Manhattan Eye and Ear Infirmary, New York, University of Vienna and served as an assistant in the Royal Aphthalinic and Central London Nose and Throat Hospital.

Dr. Peery came to West Palm Beach from Delray Beach in 1929 and was one of the leading practitioners of his specialty at the time of his death.

He was a member of the Kiwanis Club, Masonic Lodge and First Lutheran Church. He is survived by his wife, Mrs. Eleanor Peery, two daughters, Mrs. George B. Gose of Blacksburg, Va., and Miss Clara Peery of West Palm Beach.

The following resolution was passed by the Palm Beach County Medical Society at its regular meeting held December 26, 1933:

Whereas, God in His infinite wisdom hath seen fit to remove from our midst one of our most beloved brothers, Dr. Emory Willis Peery, and

Whereas, by his untiring devotion to the practice of medicine and surgery and his continued sacrifices in the interest of charity he endeared himself to the entire community, and,

Whereas, we, the members of the Palm Beach County Medical Society, feel the loss deeply of our esteemed brother and friend; therefore, be it

Resolved, That the Palm Beach County Medical Society express its sorrow in the passing of Dr. Emory Peery; that a copy of this resolution be sent to his wife; that a copy be entered on the minutes of this Society; and that the same be published in the Journal of the Florida Medical Association.

GEORGE R. PLUMMER

Dr. George R. Plummer, a native of Key West, died at his home December 31, 1933, at the age of 62 years. He was the son of a well-known doctor who was one of the leading citizens of Key West in the early days of the island's history.

Dr. Plummer attended the University of Florida, Emory University and the University of New York. He served as commander of the medical corps in the United States Navy and major in the medical corps of the Army. During the Spanish-American War he was stationed as medical officer in the Philippines for several months and he later served in Cuba and Key West. During the World War, Dr. Plummer was in charge of the medical

corps at Camp Lee, Petersburg, Virginia. It was while he was serving at Camp Lee, during the great epidemic of influenza, that he perfected granular calcium on which he had been working since his army service in Cuba.

Following his retirement from the army at the close of the World War, Dr. Plummer returned to Key West where he practiced his profession until a few months prior to his death when ill health practically forced him to abandon his work.

Dr. Plummer was buried January 1, at a military funeral service.

WILLIAM B. WINKLER

Dr. William B. Winkler, a pioneer practicing physician of Ft. Myers, died at his home October 31, 1933, at the age of 76 years.

Dr. Winkler graduated from the Memphis Hospital Medical College in 1881. He located in Ft. Myers in 1901 and practiced in that city until ill health forced him to retire. In addition to his wide practice in Ft. Myers and Lee County, Dr. Winkler for many years operated a farm and grove on Whiskey creek.

Dr. Winkler is survived by his widow, one son, one daughter and a brother.

Dr. William S. Manning of Jacksonville announces the removal of his offices from the St. James Building to Suite 310-312 Greenleaf-Crosby Building.

* * *

Dr. Jack Q. Cleveland has recently entered the general practice of medicine at Coral Gables and has offices in the Karp Building.

* * *

Dr. S. J. Simmons, formerly of Arcadia, has moved to Belle Glade.

COMPONENT COUNTY SOCIETIES

DADE COUNTY MEDICAL SOCIETY

The Dade County Medical Society, at a meeting held December 4, adopted the following report of its Committee on Medical Economics:

REPORT

Your committee has met repeatedly to discuss the matters which are before it for consideration.

At the present time, it does not feel that its work has been completed but considers that a partial report can be offered together with certain recommendations for immediate action.

1 (a) Your committee recommends that the schedule of fees accepted by the Federal Emergency Relief Administration in conference with the State Committee of Medical Economics be accepted. The schedule of fees has been approved by Mr. Alan Johnstone, the Southern Field Representative of the Federal Emergency Relief Administration, to whom has been delegated the power to act in this capacity by Mr. Harry L. Hopkins, Federal Relief Administrator, Washington, D. C.

"\$1.00 for office calls."

"\$2.00 for home visits in the city."

"\$3.00 for home visits out of the city."

"\$3.00 for night calls in the city."

"\$3.00 for night calls out of the city."

"\$15.00 for obstetrical cases, including prenatal and post-natal visits as necessary."

"6c per mile on mileage on all calls out of the city."

(b) It should be definitely understood that this fee schedule has been accepted by our State Committee on Medical Economics and that in following the recommendations of the Dade County Medical Economics Committee, our Society will approve the action of our State Medical Economics Committee.

2 (a) In order to appropriately handle the calls from the Federal Emergency Relief Administration, it will be necessary to work out some method with the local Federal Emergency Relief Administrator. Since the rules and regulations as promulgated by the Federal Emergency Relief in Washington include the appointment of a Medical Committee to work with the Administration in this regard, your Medical Economics Committee recommends that they either be empowered to act in this capacity or that a special committee be appointed for this position.

(b) Your committee believes that in order to work out a program of Emergency Relief in a satisfactory manner, it will be to the best interests of the Dade County Medical Association to engage Dr. Hampton as our representative to handle the calls which come in from the Federal Emergency Relief Administration and obtain the doctor to serve the patient in each specific instance. Your committee therefore recommends that Dr. Hampton be engaged for this position.

(c) As part of the program, it would appear wise to engage Dr. Hampton not only in the capacity of contact for Federal Emergency Relief Administration work but also as a director of the Physicians' exchange on a flat salary basis to be paid from the treasury of the Dade County Medical Association instead of receiving remuneration from the individual physicians listed on the exchange. Funds for this purpose could be obtained by the assessment of \$1.00 per month per member. This amount would defray the cost of Dr. Hampton's services as director of a physicians' exchange as listing all members of the Dade County Medical Association and also acting in the capacity of contact between the members of the Dade County Medical Association and the Federal Emergency Relief Administration. Your committee, therefore, recommends this change in the arrangements of the Dade County Medical Association under the direction of Dr. Adele Hampton.

3 (a) Your committee recommends that the Dade County Medical Association go on record as demanding a minimum fee of \$5.00 from insurance companies for all insurance examinations, inspections, certificates of health, etc., and that a copy of this action be forwarded to the home office of all insurance companies doing business in the State of Florida.

4 (a) Your committee recommends that the Dade County Medical Association go on record as opposing all free examinations of school children or other organized or unorganized groups of individuals by members of the Association. Your committee believes that such free services are a detriment to the medical profession. This shall be definitely understood that this resolution does not include services rendered through the Jackson Memorial Hospital and clinics nor the Dade County Hospital and clinics.

5 (a) Your committee takes pleasure in reporting that efforts to obtain remuneration for the physicians serving at the Jackson Memorial Hospital are progressing in a satisfactory manner. In conference with Mr. A. D. H. Fossey and Mr. L. L. Lee, City Manager, we are informed that the majority of the City Commission has recognized the justice of the claim for remuneration as it applies to the members of the Staff of the Jackson Memorial Hospital. They regret their inability to appropriately remunerate the physicians for their services but have agreed to a token payment of \$25.00 per year to each member of

the Jackson Memorial Hospital Staff. This amount will be increased to \$100.00 per year providing funds can be obtained. Your committee believes that the recognition of the principle is established with the present city government and recognizes the present financial situation of our city as a definite handicap in carrying out the proposed plans.

(b) In a study of the city's financial difficulties and the taxation plan of the city of Miami, your committee believes that the only solution to the present financial difficulties lies in the assessment of a sales tax. Your committee is further of the opinion that the relatively small group of individuals who are fighting the sales tax and advising the increase in nuisance tax as an alternative is speaking from a purely selfish motive and not for the good of the community. Your committee is of the opinion that if a sales tax were charged, the burden would be more appropriately distributed through general population and that the nuisance taxes, such as license fees for doctors and lawyers who serve the community continuously without remuneration could be eliminated; that real estate taxes which are now carrying far too heavy a proportionate burden could be reduced. Furthermore, the knowledge that this is contribution to the direct taxation to the government of the community would increase the interest of the citizenry in the method in which the money was spent. Your committee does not believe that a 1 cent sales tax on all commodities would in any way interfere with local business.

DUVAL COUNTY MEDICAL SOCIETY

The following committees have been named by Dr. Theodore G. Croft, president of the Duval County Medical Society:

Scientific Program Committee—W. S. Manning, chairman; B. F. Woolsey, Kenneth Morris, Theodore G. Croft, ex-officio.

Medical Economics Committee—E. T. Sellers, chairman, Louie Limbaugh, H. R. Drew, Thomas M. Palmer, W. G. Harris, H. A. Peyton, R. R. Killinger.

Publicity—E. B. Milam, chairman; Thomas E. Buckman.

Entertainment—Robert B. McIver, chairman; A. H. Wilkinson, Alan Brown, E. H. Teeter, Charles B. Mabry, H. B. McEuen, W. S. Manning, Luther W. Holloway.

Public Health and Legislation—Henry Hanson, chairman; Gerry R. Holden, S. E. Driskell, H. F. Horne.

County Hospital Relief—J. Knox Simpson, chairman; T. S. Field, Gerry R. Holden, Ferdinand Richards.

Automobile Accident Prevention—J. L. Boone, chairman; T. S. Field, J. B. Black.

Certified Milk—William E. Ross, chairman; Noble A. Upchurch, C. E. Royce, J. W. Hayes.

Bereavement—R. H. McGinnis, chairman; G. E. Beckman, A. C. McKenzie.

Attendance and Membership—R. H. Dean, chairman; Thomas Adams, O. P. Broadbent, S. M. Copeland, F. L. Fort, B. H. Goodale, D. E. Harrell, F. C. Jones, F. C. Keisling, R. D. May, A. Z. Oberdorfer, G. Richardson, W. R. Schnauss, E. H. Teeter, A. K. Wilson.

Dr. George W. Crile of Cleveland was honor guest and speaker at a special meeting of the Duval County Medical Society, called for 8:15 p. m., December 29. Dr. Crile's address was on "Medical and Surgical Problems of the Liver and Gall-Bladder."

HILLSBORO COUNTY MEDICAL SOCIETY

At a meeting of the Hillsboro County Medical Society, held at the Tampa Municipal Hospital, December 5, the following officers were elected for the year 1934:

President—E. S. Gilmer.

Vice-President—G. C. Bottari.

Sec'y-Treas.—John S. Helms, Jr.

Censor—W. P. Adamson.

Delegates to F. M. A. Meeting—Joseph Taylor, Bundy Allen.

PALM BEACH COUNTY MEDICAL SOCIETY

The regular meeting of the Palm Beach County Medical Society was held December 26, 1933, at the Good Samaritan Hospital. Routine business was deferred until the following meeting and election of officers was held, which resulted as follows:

President—William Y. Sayad, West Palm Beach.
Vice-President—Bailey B. Sory, Jr., West Palm Beach.

Secretary—R. Henry Baldwin, West Palm Beach.
Treasurer—Frederick K. Herpel, West Palm Beach.

Delegates to the Convention—F. K. Herpel, Geo. M. Dawson.

Alternates—V. D. Stone, S. Ward Fleming.

Censorship Committee—Gaylord Lewis.

Resolutions were passed in respect to the deaths of Dr. Thomas Gunter and Dr. Emory Peery.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

Dr. George R. Creekmore of Brooksville entertained the Pasco-Hernando-Citrus County Medical Society at the Tangerine Hotel, Thursday evening, December 14, 1933. After enjoying a full course dinner the annual election of officers was held and the following were elected for the ensuing year:

President—P. J. Hudson, Crystal River.

First Vice-Pres.—Claude Anderson, Dade City.

Second Vice-Pres.—S. C. Harvard, Brooksville.

Sec'y-Treas.—George R. Creekmore, Brooksville.

Delegate to State Medical Association—A. B. Cannon, Lacoochee.

Alternate Delegate—George A. Dame, Inverness.

It was decided to hold the Society's annual banquet Thursday evening, January 11, 1934, at the Tangerine Hotel, Brooksville.

PINELLAS COUNTY MEDICAL SOCIETY

The following letter was recently addressed to hotel and apartment house managers of St. Petersburg by the Pinellas County Medical Society:

"The Pinellas County Medical Society is the only local unit of the Florida Medical Association and the American Medical Association.

"Hotel and apartment house managers are frequently requested by guests to recommend physicians. One manager has suggested this letter, because he was greatly embarrassed last winter by unintentionally naming an irregular practitioner to a highly educated guest. The guest-patient quickly sensed the error and friendship to the hotel ceased, because she assumed that 'birds of a feather flock together.' In this case, the assumption was incorrect, but the hotel lost a guest because of it.

"The roster of members published in the advertising section of the Telephone Directory represents men and women who have qualified to the high standard of the American Medical Association and have been licensed after examination by the Regular Board of Medical Examiners of the State of Florida. To this roster, you may refer your guests safely.

"PINELLAS COUNTY MEDICAL SOCIETY, INC."

POLK COUNTY MEDICAL SOCIETY

The December meeting of the Polk County Medical Society was held at the Ft. Meade Hotel, Ft. Meade. Dr. George Carefoot of Ft. Meade, who entertained the Society, proved a genial host.

Miss Josephine Dickey, county nurse, gave an interesting report on diphtheria carriers and positive hookworms found among the school children. Dr. R. E. Wilhoyte of Lake Wales reported, as chairman of his committee, that the County Commissioners were favorably inclined towards the Society's proposal of allowing the county charity patients the privilege of going to the City Hospital nearest them in place of the County Pauper Hospital but that a legal technicality prevented this now. The Society voted that the Committee continue its good work and that it take steps to remove this legal obstacle.

The election of officers resulted as follows:

President—H. B. Cordes, Frostproof.

Vice-President—H. M. Richards, Lakeland.

Sec'y-Treas.—J. R. Boulware, Jr., Lakeland.

Censor—R. H. Mooty, Winter Haven.

The program of the evening was in charge of Dr. R. L. Cline of Lakeland. He discussed in a short paper the causes and newer treatment of asthma. Dr. R. L. Sanderson, Lakeland, discussed the laboratory findings in asthmatic patients. The symposium was concluded by a discussion by Dr. Kenneth Phillips of Miami. Lakeland was chosen as the next meeting place of the Society.

SEMINOLE COUNTY MEDICAL SOCIETY

At the annual election of officers held by the Seminole County Medical Society recently, the following were chosen for the ensuing year:

President—A. W. Knox, Sanford.

Vice-President—C. L. Park, Sanford.

Sec'y-Treas.—J. T. Denton, Sanford.

Delegate to State Convention—J. T. Denton.

VOLUSIA COUNTY MEDICAL SOCIETY

The following report was recently submitted to the Volusia County Medical Society by its Committee on Medical Economics:

REPORT

On November 21, 1933, a meeting was called of the Medical Economics Committee of the Volusia County Medical Society. Present were: Doctors Bouchelle, Forster, Taylor, Glatzau, West, Sterns, Rawlings, Myres and Wells.

The following work was proposed, and disposed of, by the Committee, and is herewith presented to the County Medical Society for discussion and adoption, or rejection.

Re: City Licenses. It was moved and seconded that we ask for reduced license fees, but after considerable discussion this matter was tabled.

Re: The Matter of the Care of County or City Cases. Moved and seconded (Glatzau-Myres), and unanimously adopted that: cases which can not be taken care of by the County, or the City, physician, which are referred to other physicians by a County, or City, official, are to be paid for by the County, or City, Commission in question. An amendment to the above motion was unanimously agreed upon. A letter is to be written to the County and City Commissioners stating that the County and City physicians should not be responsible for surgical, or other specialties, and when citizens are in need of such assistance, it should be paid for by the County, or City, in question. Amendment No. 2 was also unanimously adopted: that all cases attended by another physician when the County, or City, physician, is not available should be paid for by the County, or City, in question.

Re: Medical Fees—Legal. Regularly moved and seconded (Myres-Forster) and unanimously adopted that: 1st, the Volusia County Medical Society ask the State Association to take steps to remove the statute from the Statute Books of Florida in regards to a fixed fee for autopsies; 2nd, a similar action to be taken through the same source in regards to the fixed fee for expert medical testimony.

Re: Injuries, or Sickness, to School Children. Regularly moved and seconded (Bouchelle-Forster) and unanimously adopted that: concerning all school children hurt on the school premises, or becoming sick on school premises, proven to be directly due to appliances or environments of the school, or its surrounding school playgrounds, a letter is to be written to the School Boards of the County, explaining that a child hurt, or sick in school, the parents are strongly under the impression they should not pay the physician, surgeon, or other medical man, for services rendered; this letter to request that the question be brought up before the School Board and a suggestion made that an appropriation be put aside in the School funds to provide for cases of undoubted sickness, or injury, due to school appliances, including outdoor and indoor gym-

nasium and play apparatus. A second motion (Bouchelle-Myres) was unanimously carried that: a similar letter be sent to the various Athletic Associations whether coming under the heading of schools or not, but having separate treasuries. This second letter should be in stronger terms than the first.

Re: Free Service to Clubs, or Other Benevolent Associations. Moved and seconded (Myres-Bouchelle) and unanimously carried. All members of the Volusia County Medical Society are prohibited from rendering free services to indigent persons *when* sustenance, rent, or other services, including a nurse or social worker, are paid for from Club or Association treasuries. If these indigents are not furnished with food, or clothing, or visiting nurse, the physician can do as he sees proper in each case.

Re: Advertising in Public Press. Motion passed that the Society investigate the price for an insertion of a roster of the County Medical Society, including names, addresses, office hours, and specialties if they exist, in the Sunday or Saturday edition of the five newspapers in the County, namely two in Daytona Beach, two in New Smyrna, and one in DeLand. These prices, if the Society agrees the insertion is ethical, and for the good of the whole Society, are to be investigated by members of the Society, and the prices of same are to be reported at a regular meeting and action taken for, or against the acceptance of this advertising.

Re: Insurance. Moved and seconded (Bouchelle-Sterns), and unanimously adopted that: after carefully reading, and carefully analyzing each item, the insurance suggestion as adopted by the Philadelphia County Medical Society, and further incorporated as a part of the Medical Economics Committee report for adoption by the Florida Medical Association, be adopted by the Volusia County Medical Society. It is herewith incorporated in this report, without change.

The meeting was adjourned subject to the call of the Chairman.

This meeting being the final meeting of the year 1933 for this Committee, we wish to express our appreciation for the consideration and co-operation of the Society, and to terminate our services pending new appointments for the year 1934.

Respectfully submitted,

J. RALSTON WELLS, M.D., Chairman,
Medical Economics Committee,
Volusia County Medical Society.

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, Inc.

State Editor

Mrs S. E. DRISKELL
1410 Windsor Place
Jacksonville, Florida.

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Mrs. E. W. VEAL, Vice-President	So. Jacksonville
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COMMITTEE CHAIRMEN

Mrs. A. L. MILLS, Program	St. Petersburg
Mrs. J. RALSTON WELLS, Public Relations	Daytona Beach
Mrs. H. Q. JONES, Hygeia	Fort Myers
Mrs. A. S. WALTERS, Finance	Miami Beach
Mrs. S. E. DRISKELL, Press and Publicity	Jacksonville

The entire membership of the Auxiliary extends sympathy to Mrs. E. R. McMurray of Bartow on account of the loss of her husband.

BROWARD COUNTY

The Broward Auxiliary had their first meeting of the year in November. They planned to assist in relief work.

The following board members enjoyed a spend-the-day at the home of Mrs. Peek, state president, in Ocala on December 8th: Mrs. E. W. Veal, Jacksonville; Mrs. Wilburn Lassiter, Gainesville; Mrs. J. Ralston Wells, Daytona Beach; Mrs. A. L. Mills, St. Petersburg.

POLK COUNTY

Thirteen members of the Polk County Auxiliary and one guest enjoyed a lovely four course dinner at Hotel Reif in Fort Meade on the night of December 13th. Following the dinner all went over to the home of Mrs. George Carefoot and went into business session. The president, Mrs. J. F. Wilson, being absent, the past-president, Mrs. E. R. McMurray, presided. Definite plans were made about placing baby layettes in the different hospitals in Polk County, to be used by babies without the proper clothes, but not to be removed from the hospitals.

Bridge was played following the business meeting.

PINELLAS AUXILIARY

At their first luncheon meeting of the season, which was held at the Gypsy Inn, the Pinellas Medical Auxiliary had as their guest speaker Mr. E. M. Berryman of the Berryman laboratories in St. Petersburg, who spoke in justification of

animal experimentation and gave many interesting facts in protest against those who would concentrate their efforts in an attempt to prohibit experiments on dogs.

Mr. Berryman said that most of the organisms of the acute infectious diseases have been isolated through animal experimentation and methods perfected of successfully combating many others. He declared the public should be thoroughly enlightened lest its own future welfare be damaged.

The president, Mrs. John Herring, appointed the following committee chairmen for the year: hospitality, Mrs. A. P. Roope; public relations, Mrs. Hugh Wade; program, Mrs. W. W. Harden; Hygeia, Mrs. Prescott LeBreton; press, Mrs. Alvin Mills. Mrs. J. A. Strickland spoke of the work done by the Auxiliary last year in providing speakers who outlined the county health unit plan and emphasized the need of such a unit in Pinellas County.

A very representative membership was present at this meeting.

On December 5th the Pinellas Auxiliary members gave a musical tea for the visiting women of the Florida Public Health Association at the home of Mrs. John A. Herring. Mrs. Mark Boyd and Mrs. Henry Hanson were the honor guests.

Pouring tea were the past presidents of the Auxiliary, Mrs. Glenn Post, Jr., Mrs. Alvin Mills, and Mrs. J. A. Strickland, and Mrs. Carl Williams, parliamentarian.

Mrs. R. K. O'Brien, Mrs. Claude Wright and Mrs. Charlotte Pratt Weeks had charge of the music.

Mrs. Glenn Post, Jr., as chairman of Home Hygiene of the local Red Cross Chapter, recently arranged a series of health talks continuing for a week, when some one from the medical Society gave a health talk each morning.

* * *

MARION AUXILIARY

The Auxiliary to the Marion County Medical Society had its monthly meeting Nov. 24, at the home of Mrs. R. D. Ferguson with Mrs. Helen Sutton Harris and Mrs. Ralph E. Russell assisting hostesses. A delicious three course luncheon was served, followed by a business session, Mrs. T. H. Wallis, president, presiding.

Interest centered on the tuberculosis drive and the Auxiliary pledged its help in the Christmas seal sale. This is of special interest at present since Marion County is striving to build a hos-

pital for this needed purpose. Plans were made to put Hygeia in the city schools.

Mrs. Eugene G. Peek, state president, suggested a Jane Todd Crawford essay contest in the schools and it was voted that the Auxiliary would co-operate in this contest. Bridge was enjoyed after the business session.

ADVERTISERS' NOTES

EXTRALIN

Extralin, a liver-stomach concentrate for the oral treatment of pernicious anemia, would appear to represent the ultimate in refinement and concentration of effective measures for this condition. Great progress has marked laboratory researches in liver therapy since the initial introduction of this mode of treatment. Extralin is a product of the Lilly Laboratories. It is supplied in capsules, which makes oral therapy convenient. Patients more often than not prefer this form of administration to the parenteral route. It does not subject the patient to the hazards of sensitization. The therapeutic efficiency of Extralin per unit of weight is said to be far greater than that of any other liver product commercially available for oral administration, and Eli Lilly and Company are responsible for the statement that Extralin reduces the cost of efficient treatment in pernicious anemia to a point lower than the cost of treatment with calves' liver at the prevailing market price. One gram of Extralin represents the anti-anemic potency of 40 grams of fresh raw liver. It is reported that every lot is tested on authentic cases of pernicious anemia in relapse.

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Horses are immunized against types I, II and III pneumococcus by injecting the bacteria intravenously and the centrifuged broth cultures subcutaneously and intramuscularly. By this treatment specific antibodies, active against the organisms, as well as against toxic substances in the broth cultures, are produced in the blood of the horses. Treatment of horses is continued until tests with the serum obtained from small trial bleedings, indicate that the serum, in 1 cc. dose, has the required protective effect of the National Institute of Health when injected into mice along with 500,000 fatal doses of virulent pneumococci.

Concentration and Refinement of Pneumonia Sera

When the serum of the treated horses shows the required protective value for mice, full bleedings are taken. The serum is separated from the corpuscles and subjected to processes of concentration and refinement to remove the proteins contained in the serum and retain, as much as possible, the specific pneumococcus antibodies. The serum is treated especially to remove those substances contained in horse serum which are responsible for producing chill.

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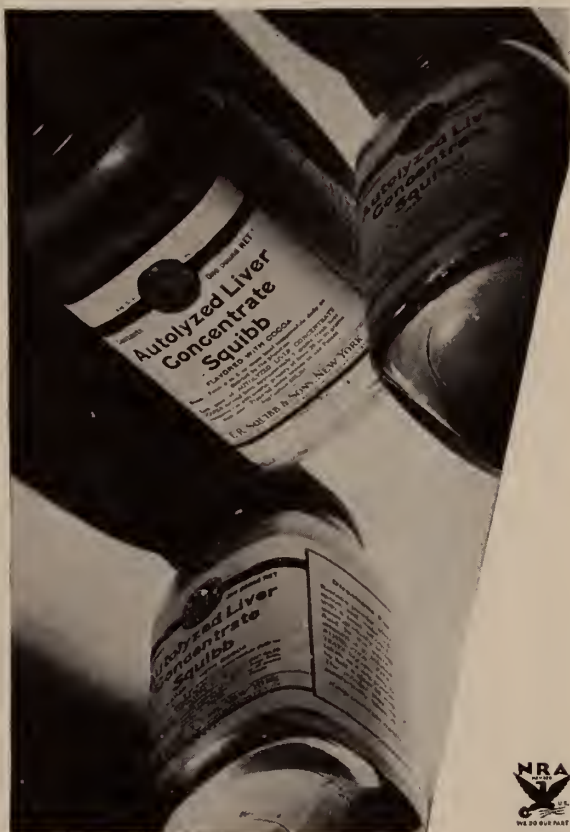
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mococcus in the serum is either type I, II, or III the use of the serum should be continued. If, however, the pneumococcus in the sputum belongs to group IV, the use of the serum may be discontinued, unless it exerts a favorable effect on the patient.

Monovalent typing serums for Types I, II and III pneumococcus are available and can be supplied on request.

Manner of Using Pneumonia Sera

The serum should always be warmed to about 95° F. for intravenous injection and given slowly, by first drawing into the syringe a small amount of blood from the patient and mixing with the serum, giving a small amount of serum, then stopping and noting the effect, so that not more than 5 cc. of serum is given during the first 5 or 10 minutes. Serum administered intravenously should never be injected rapidly otherwise the patient may experience definite disturbances.

In serum sensitive patients it is advisable to administer a 1 cc. dose of 1:1000 epinephrine solution. Whenever any patient shows evidence of disturbed nervous reaction epinephrine should also be given.

The initial dose of pneumonia serum should be 10 to 20 cc., followed in 6 hours by a similar, or larger, dose as indicated by the day of the disease and the response of the patient to treatment. The physician should aim to administer sufficient serum during the first 24 hours of treatment to bring about a prompt abatement of the symptoms. Treatment should be continued until the temperature falls to 99 or 100° F. Unless the temperature rises to 101° F. or over subsequently, no further doses of serum may be required.

With adequate doses of pneumonia serum the temperature of the patient falls by crisis in about 24 hours. The signs of cyanosis disappear, the resolution of the consolidated lung is started, and the patient convalesces rapidly unless some organic defect or other intercurrent infection is present.

Not all patients, suffering with pneumonia due to types I, II or III pneumococcus, recover under serum treatment. The reasons for deaths in serum treated pneumonia patients are generally due to (1) delay in administration of the serum; (2) inadequate doses of serum; (3) infection due to a type of pneumococcus other than types I, II or III; (4) the presence of organic disease



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(Donnelly, John D., *Artificial Feeding of Infants in Private Practice*, *Penn. Med. Jour.*, Vol. XXXVI, No. 8, May, 1933.)

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of the heart, liver or kidneys; or (5) the presence of an intercurrent infection by streptococci, staphylococci, or other microorganisms which cause the death of the patient.

The National Drug Company of Philadelphia will mail literature on Refined Pneumonia Sera to physicians on request.

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COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon ?	
Alachua	J. Maxey Dell, Jr., M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	
Bay	Allen H. Miller, M.D., Millville.					
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	
Hillsboro	John S. Helms, Jr., M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	67%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	
Marion	Richard C. Cumming, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	
Orange	John A. Pines, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	
Palm Beach	R. Henry Baldwin, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	
Pinellas	O. O. Feaster, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	47%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	
St. Lucie-Okeechobee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	
Seminole	J. T. Denton, M.D., Sanford.	2nd Monday	7:00 P.M.	City Hospital Sanford		
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	
Taylor	C. A. O'Quinn, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	

NOTE—Secretaries: Please submit information to complete the above schedule.

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Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 8

Jacksonville, Florida, February, 1934

Yearly Subscription, \$3.00
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NEXT SESSIONS

Florida Medical Association, Jacksonville, April 30, May 1, 2, 1934.
American Medical Association, Cleveland, June 11-15, 1934.

Entered as second-class matter under Act of Congress of March 3, 1879, at the Postoffice at Jacksonville, Florida, October 23, 1924

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continued from Oct., 1933

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, February, 1934

Number 8

UNILATERAL EXOPHTHALMOS WITH CASE REPORT*

JOSEPH W. TAYLOR, M.D.,
Tampa.

The condition of unilateral exophthalmos should command immediate attention and investigation. It is the most prominent and constant symptom in diseases of the orbit and often requires prompt surgical intervention if ocular tissues are to be saved and, many times, if life itself is to be spared.

The position of the eyeball in the orbit is subject to individual variation. As a rule the cornea projects very slightly beyond an imaginary line drawn from the upper to the lower margin of the orbit, so that a ruler placed in this position would touch the closed upper lid and exercise only slight pressure on it.

One of the common signs of exophthalmos is displacement of the eye well forward, which is usually accompanied by more or less lateral or vertical displacement. In slight degrees of proptosis the relative positions of the eyes can be best compared by observing the level of the cornea from behind and above the patient's head. Many instruments have been devised for the measurement of the amount of protrusion and of these Hertel's exophthalmometer is one of the best. In the absence of an exophthalmometer, a rough measurement may be taken with a millimeter scale held at the side of the face. The eyes should be directed straight ahead and the distance from the external canthus to the corneal apex measured on each side. The examiner's eye should be held in an imaginary plane running through both external canthi and approximately the same distance away from the eye during each examination.

The causes of true unilateral exophthalmos are: increase in volume of the orbital contents or diminution in the capacity of the orbit; prominence of an enlarged eyeball, due to high myopia or to anterior staphyloma. The slight degree of exophthalmos which results from relaxation or loss of tone in the orbital muscles when several of them are simultaneously paralyzed, is

not reckoned as true exophthalmos. Again, the physiological forward position of the eyes sometimes present in very stout persons or the negro race must not be misinterpreted. Retraction of the lids which follow the use of cocaine and which occurs in the early stage of exophthalmic goiter may produce the appearance of proptosis, without any real displacement of the eyeball.

Unilateral exophthalmos may be classified according to etiology into non-inflammatory and inflammatory types. In the non-inflammatory exophthalmos we have the following conditions: hemorrhage into the orbit; anisometropia; emphysema of the orbital tissues; paralysis of ocular muscles; pulsating exophthalmos; tumors: aneurysma; gunmata; meningocele and cephalocele; and, defects in the skull. In the inflammatory exophthalmos we have: panophthalmitis; tenonitis; orbital cellulitis and abscess; cavernous sinus thrombosis; and, periostitis.

CASE No. 1.—Mrs. C., age 60, was seen November 2, 1920, in consultation with a doctor from Sarasota.

Ten days previously, while blowing her nose quite violently, she suffered a severe pain in the left eye. The pain, which continued to be intense for two days, was located both in eyeball and temple. During this period, she noticed the eyeball gradually pushing forward with marked swelling of the eyelids. She had been free of pain for three days preceding consultation.

Examination right eye: normal in appearance, vision 20/200 corrected to 20/20. Left eye: marked edema of the lids, conjunctiva protruding between the lids and very edematous; extreme proptosis directly forward; eyeball fixed; cornea and media clear; fundus showed marked congestion of retinal veins; disc pale; no vision. Questionable if crepitation were elicited; no pulsation.

The patient was sent to the hospital; ice compresses and pressure bandage ordered. The inflammation, edema and proptosis gradually receded. On the ninth day the eye was about normal; by the fifteenth day, the proptosis had entirely subsided, eyeball back in position, nerve head showed beginning optic atrophy. The patient was sent home. She was not seen again until April 14, 1921, five months later. The eye was

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

normal in appearance except for dilated pupil that did not react to light; tension was normal; examination of eye grounds showed complete optic atrophy. (eye totally blind).

In this case, I believe, there was a dehiscence of the orbital plate permitting air to enter the posterior orbital space. The optic atrophy was probably the result of extreme stretching of the nerve.

CASE No. 2.—Mr. M., age 22, was first seen on February 2, 1933.

Three days previously he was struck in the left eye while in a fist fight. When examined there was pronounced proptosis, so great that even the swollen upper lid failed to cover and protect the lower half of the cornea, which was already hazy. The conjunctiva was edematous and was pouting between the lids, and the eye immobile. Retinoscopic examination showed the middle turbinate on the effected side to be greatly swollen; the anterior third appeared to have fluid present. This was opened, and a number of small dark clots of blood were removed. An ophthalmoscopic examination showed the media were clear; the disc margin was distinct and of good color. The veins were slightly tortuous but not noticeably enlarged. Vision of fingers at three feet.

probed for pus, but none was located. Hot applications were used and three days later the lower lid ruptured with free pus. The next day the same thing happened to the upper lid. We were able to probe through these openings into the posterior orbital region. The discharge continued for two weeks longer. At the end of this time the proptosis and other symptoms had almost subsided. He was referred back to his physician in Sebring for further observation.



CASE No. 2—Six weeks later. Note sight of drainage on upper and lower lid.



CASE No. 2—Orbital Cellulitis and Abscess. Note extreme proptosis and edema of lids. Conjunctiva pouting between lids. Cornea lower third exposed.

The patient was sent to the hospital with a temperature of 101° . Ice compresses and pressure bandage were ordered. Pain and swelling gradually subsided although there was still marked proptosis. The patient insisted that he return to his home one hundred miles distant. He came back to the hospital in four days with severe pain and more edema. The orbit was

This case might have been terminated more rapidly by making free incision and drainage. However, in the face of marked cellulitis, conservative treatment is probably safer.

April 11, 1933, two months later, the left eye was normal in appearance except for slight thickening of eyelids. Vision was 20/50 plus; eye grounds normal; lower margin of cornea hazy with few vessels extending from limbus.

CASE No. 3, Mucus Cyst of Orbit. Mrs. C., age 22, was first seen March 14, 1931.

Five or six years previously her younger brother called attention to the fact that one eye was larger than the other. This difference gradually became more marked as time went on. For the previous two years, headache had been constant, but with no pain in the eyes. The patient stated that she had a thick mucus discharge from the left nostril. The discharge was not constant, there being intervals of dryness. During these two years she had been extremely nervous due to the headaches and worrying over her eye condition.

Examination showed a marked exophthalmos of the left eye. Conjunctiva and cornea were

normal; pupils equal; reaction normal; vision 20/20 each eye. Fundus examination showed disc outline distinct, retina and choroid normal. Muscle balance was normal; free movement of the globe in all directions; proptosis directly forward; blood Kolmer negative. Drs. Dickinson and Allen submitted the following x-ray report: "The examination of the nasal accessory sinuses of your patient shows very small normal frontals; the ethmoids and antra are fairly clear. There is nothing in the sinuses or cranium that is suggestive of a pathological lesion. The right and left optic foramen are well outlined and normal in appearance. The examination shows nothing at this time to account for the exophthalmos."

Operation for the proptosis was discussed, but refused by patient.

On January 8, 1932, ten months later, she came in for operation. At this time the proptosis had increased 3 mm. The patient was sent to the hospital and a Krönlein operation performed. A large mass was found at the apex of the orbit, extending from above and to the nasal side of the optic nerve. Upon attempted removal, it was ruptured. The contents showed a thick heavy mucus. After removing the secretion with suction, the sac was dissected free and removed in a mass. There was ample room to work without cutting the external recti. The bone was replaced. Closure was made with skin sutures of silk worm with no drainage. The laboratory reported the following: "The tissue is an irregular membranous mass rather soft and friable in texture. Microscopical section shows no evidence of malignancy. The sections are covered on one edge with thin squamous epithelium. The underlying

tissue is edematous, congested and shows numerous large Meribomian glands. There is much extravasation of blood." (Dr. H. R. Mills, Pathologist).

Convalescence was uneventful, except the patient complained of extreme diplopia, which continued for about ten months before disappearing.

The treatment, obviously, is very essential, inasmuch as there are many causes of unilateral



CASE No. 3—Eye back in normal position. Hair line scar. Spots on cheek and neck are moles.

exophthalmos and, for lack of time, suffice it to say in this connection that the correction of the existing etiology is of prime importance.

DISCUSSION

Dr. R. R. Duke, Tampa:

In enjoyed Dr. Taylor's paper and think it was very good.

Unilateral exophthalmos is rather rare. Over a period of the last ten or twelve years, I believe that I have had six cases. These were all inflammatory. Two resulted from trauma. In one of these the patient was struck in the eye with a baseball; the other was struck in the eye during a fight. In both of these cases the exophthalmos subsided and the patients were practically well within about twelve days after injury. The other four cases resulted from ethmoiditis. The ethmoids were involved, and the infection extended through the lamina papyra into the orbital cavity, posterior to the globe. An exenteration of the anterior ethmoid cells was done, the opening through lamina papyra was enlarged to allow drainage of the orbital fossa. The exophthalmos subsided in about twelve days. All of these patients recovered without any loss of vision.



CASE No. 3—Front view. Note marked widening of palpebral fissure. Profile shows amount of proptosis present.

HEART DISEASE OF THE RHEUMATIC TYPE*

C. F. ROCHE, M.D., Miami Beach,
and

T. DUCKETT JONES, M.D., Boston.

A seasonal transportation experiment covering the years 1930-1933, inclusive, conducted at the St. Francis Hospital, Miami Beach, Florida, is herein outlined. It concerns small groups of children with severe heart disease of the rheumatic type from the cardiac divisions of the Massachusetts General Hospital and the House of the Good Samaritan of Boston, Mass.

The purpose of this paper is to stimulate further interest in the treatment of a crippling form of heart disease which is known to be of very low incidence in the southern and sub-tropical sections of the United States. The importance of this study is indicated by the observations of White and Jones,¹ wherein they state that in New England rheumatic heart disease accounts for approximately 40% of all cases of heart disease, of which 93% are under the age of 20 years. No attempt will be made at this time to more than briefly evaluate the various factors which might

be concerned in the recovery process or clinical improvement of the cases which have been under observation. Neither is it possible to present detailed individual data concerning the clinical cases. This short summary is primarily of interest since it represents the study of the effect of climate on rheumatic fever.

In all, fourteen individuals were observed over the stated periods; six children in 1930-1931; six children in 1931-1932, including one from the previous year; and five children in 1932-1933, including two held over from 1932. As to sex, five were male and nine female, averaging about nine years of age. Eight were of American parentage, three Italian, two Hebrew and one Portuguese.

From the known time of onset, the average duration of the rheumatic infection prior to their arrival in Florida, was slightly over four years. The period of hospitalization prior to their being transported South was on an average for the three groups about eighteen months during which time they were carefully observed and given highly specialized attention. All had one or more of the various manifestations of rheumatic fever at the time of transportation.

Of some interest were the valvular lesions

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.



FIG. 1.—1930-31 Group, prior to transportation to Florida.



FIG. 2.—1930-31 Group, after eight months in Florida.

involved. Mitral regurgitation and stenosis were uniformly present; in addition, five had aortic regurgitation, two auricular fibrillation and one pulmonary stenosis. One death occurred in the second group and one in the third group, a mortality of 14.3% over the three-year period. The death in each case was the result of severe rheumatic fever. In one child there was no cessation of severe rheumatic fever, while the second child died as a result of fulminant rheumatic fever, the onset occurring at the time of transportation. Both deaths occurred shortly after the patients reached Florida.

Recurrence of the rheumatic infection was noted several times after varying intervals of quiescence especially in the second and third groups. Renal infarction, proved at autopsy, occurred in one instance and the so-called rheumatic type of pneumonia was noted twice, occurring in each instance in April, after several months' residence here.

The average gain in weight was twelve pounds, the highest individual gain being twenty-five pounds, and the lowest one pound, the latter

figure being the effort of a seriously sick child who died.

In all the children there was a conspicuous improvement. This is clearly demonstrated by the accompanying photographs and weight curve. The illustrations presented are from the first transported group. Striking is the noticeable change in expression which every child has shown. The improvement was most noticeable in the first group of transported children. The second and third groups had had severe and more recent rheumatic fever.

Of interest is the subsequent course upon return to Boston. The first group has remained generally well, despite two winters in New England. One child of this group was returned to Florida a second season because of the severity of his heart disease and rheumatic fever. This child has retained his Florida weight and had no illness despite poor home conditions. Four of the remaining five children have gained weight and are in excellent condition, leading active lives. One of these four children has had mild rheumatic fever twice, but with satisfactory recovery

despite subcutaneous nodules being present with the first attack.

The sixth child of this group is now well despite having lost a few pounds in weight. Mastoiditis occurred in this child shortly after his return to Boston, but operation, and a subsequent abscess in the mastoid scar, were well tolerated. Only one child has had frank rheumatic fever in two years. One is surprised at their continued well being, despite frequent respiratory infection which, as is well known, frequently precedes recurrent rheumatic fever.

Of the second group, one is included in the first group since he represented a return case. Two other children were returned a second year, being now at the St. Francis Hospital. Both are doing well. A fourth child died as a result of recurrent rheumatic fever shortly after reaching Florida. Two children are at present in Boston, both being in excellent condition. In one of these, low-grade rheumatic fever persisted in Florida and now, eight months after return to Boston, there is for the first time no evidence of active rheumatic fever. This child has had active rheumatic fever for several years and has im-

proved slowly, but more noticeably, in Florida. The sixth child is entirely well, and has had no active rheumatic fever during this winter for the first time in twelve years.

One might briefly summarize by stating that in twelve of fourteen cases of active rheumatic fever in children with severe rheumatic heart disease, there has been a striking clinical improvement during the period of observation in Florida and the rate of improvement has been greater than under good conditions in New England. The after-story in New England has been surprisingly good. It was not expected, nor is it claimed, that this well-being will continue after return to the influences under which the disease originally developed.

While it is useless to speculate concerning the probable cause of improvement in this sub-tropical environment, it would be unfair not to mention briefly some factors. The etiology of rheumatic fever remains obscure despite much attention and study during recent years. That there is a climatic and geographic distribution of the disease is recognized but not yet satisfactorily worked out. That the disease seems roughly to

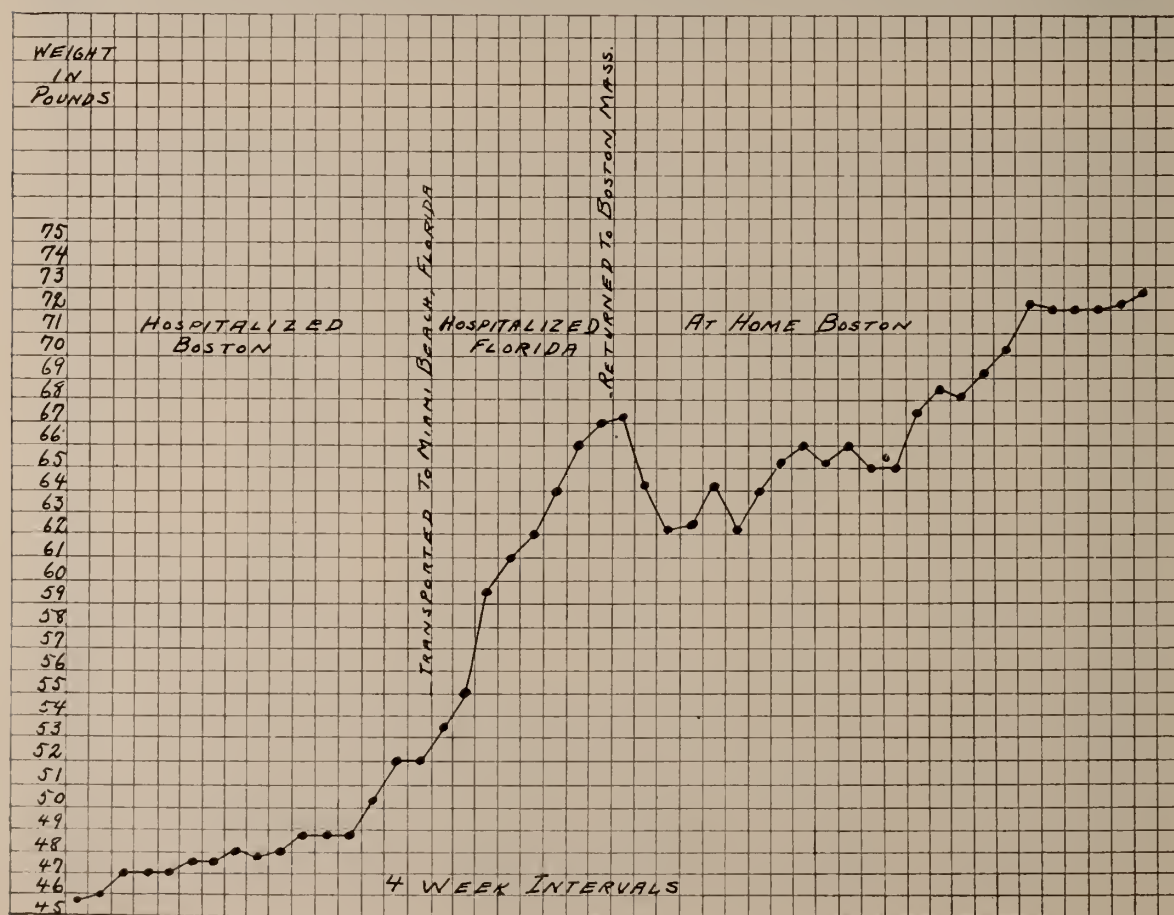


FIG. 3.—Composite weight chart of 1930-31 Group.

parallel the incidence and severity of scarlet fever and streptococcus diseases in general has been pointed out, especially by Coburn.² The transportation of these children confirms strikingly the transportation of such cases to Porto Rico by the same observer. However, the role of the hemolytic streptococcus has not as yet been fully evaluated and, though it seems likely that this organism is active during at least the early phases of rheumatic fever, the indictment of it as being the specific etiological agent is not certain. That respiratory infection usually precedes rheumatic fever is well known and it is possible that unknown factors, such as viruses, may be important. The frequency of the presence of the hemolytic streptococcus in the throat during upper respiratory tract infection in general has been long recognized and hence the relationship between these organisms during the respiratory infection that precedes rheumatic fever may be non-specific.

Of the other factors, ultra-violet alone may be definitely considered as non-specific since artificial therapy of this type does not result in striking clinical improvement and in cases with very active evidence of infection it is contraindicated, as it is also in pulmonary tuberculosis.

This report is presented to inform the medical profession of the possibilities and probabilities. The experiment is a logical one which is being used as a means of studying the recovery process of the disease and its etiological considerations.

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DISCUSSION

Dr. Hubbard Gates, Bradenton:

This is a very interesting paper. I have been practicing medicine in Florida since 1900, and I feel that there is one important feature which should be emphasized—that is, the iodine content of our atmosphere. We have had quite a boom, hot air stuff, about the iodine content of the vegetables in Florida which I think proved to be probably one drop of tincture of iodine to the carload. But in respiratory troubles there is the constant inhalation and exhalation of iodine, especially from the gulf stream and from the gulf. There is a decomposition of vegetation that gathers and the iodine washes up on shore. The original source of iodine was the ocean and

its vegetative group. Also the food we get from the ocean is full of iodine. We get iodine in its natural state, probably by breathing air that comes from the gulf stream.

The other factor, of course, is sunshine; the constant, invariable atmospheric conditions.

I took the trouble to see about the iodine content of the atmosphere. All metals decompose very rapidly on the coast of Florida. I took my pocket knife and laid it out perfectly dry and under cover so that the dew would not touch it, and in one night there was a film of rust on my knife. This accounts for our screens going so rapidly. I scraped the rust off and tested it for iodine, and I found iodine in the rust on my knife.

I think that one factor that helps to heal these rheumatic conditions, is the iodine content of the atmosphere.

Dr. E. Sterling Nichol, Miami:

I want to congratulate Dr. Jones and Dr. Roche for their very excellent piece of work along this line. They have had an opportunity to get more accurate statistics regarding the clinical improvement of such children than probably anybody else performing transportation experiments, with the exception of Coburn.

I have had interest in this problem for the last six or seven years. Some of those present may remember the Florida East Coast meeting four years ago in which I reported the incidence of acute rheumatic fever as it occurred in Jackson Memorial Hospital. We had four cases among thirty-one thousand admissions. However, there were six cases of chorea, giving a total of ten cases. Since that time I have been making a further survey, using statistics gathered in Jackson Memorial Hospital and from a survey of the school children in Miami. In a group of fifteen hundred school children born and raised in Miami (and incidentally, we do not have a large percentage of children born and raised in Miami, because it is rather a new town) only seven cases of rheumatic heart disease were found on routine examination. Whereas, in a comparable group of fifteen hundred children who had moved down from the north and taken up residence in Miami, twenty-four cases of rheumatic heart disease were found. This certainly bears out the contention that not only we do not have rheumatic fever to any great extent in South Florida, but neither do we have rheumatic heart disease to any extent.

I cannot agree with Dr. Jones that an absence of respiratory infections accounts for our low

incidence of rheumatic heart disease in Southern Florida. I do not believe that we have a low rate of respiratory infections in southern Florida. I believe, however, our respiratory infections are associated with organisms of low virulence.

The reason for our absence of rheumatic fever may be this difference in the virulence of the respiratory infections.

Dr. T. Duckett Jones, Boston (concluding):

I am firmly convinced that respiratory infection itself is an important factor in the development of rheumatic fever. However, I can also agree with Dr. Nichols in what he says to you about respiratory infections here. I am sure that the people do have such infections, but they are evidently different from those found in the northern climate.

As to the presence or absence of hemolytic streptococci being an important factor, I do not know. Certainly if the ordinary common cold can be followed by pneumonia and death, there is something that comes into play at that time which is a determining factor, in addition, of course, to the pulmonary involvement and the reaction of the patient being important. Very comparable to this is the diphtheria situation in tropical climates. As you know, in the tropics diphtheria is rare. Diphtheria organisms, however, are present which are capable of producing the disease in animals, and there is no reason why people should not have diphtheria, unless they have an immunity.

No matter what your opinion about respiratory infection is, or whether any particular causative agent comes to your mind, when you consider rheumatic fever it must be admitted that individuals who have had one attack are prone to recurrences, and it is the rule to have upper respiratory infection prior to these recurrences. We seem to have epidemics of rheumatic fever in the same family following respiratory infection in that family. It is possible for one or two of a family to have severe sore throats or colds and a third child not have evident respiratory infection, but ten to fourteen days later develop acute rheumatic fever. In other words, respiratory infection in a close contact may be followed by rheumatic fever in an exposed person without first developing clinical respiratory infection. I know that there are a great many natural considerations that must be taken into account and studied, but rheumatic fever is an infectious disease and closely related in some way to respiratory infection.

EPIDEMIC ENCEPHALITIS: GENERAL CONSIDERATIONS*

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During the late summer just passed, there occurred in St. Louis and neighboring communities a sharp outbreak of encephalitis which in many respects differed from the hitherto accepted type of this disease. Sufficient time has not yet elapsed to permit absolute separation by immunological means of the St. Louis type from the older, better known, disease, but there seems to be sufficient differences in epidemiological and clinical factors to indicate that we are dealing with a central nervous system infection which has not been recognized heretofore in severe epidemic form in the United States. It is very probable that small numbers of cases have been occurring in different localities for many years, and these might very easily be overlooked, but most assuredly no outbreak comparable to that witnessed during the past summer has taken place. The Illinois State Department of Health reported 27 cases of a similar disease occurring in Paris during the summer of 1932. The last century has seen the virus of poliomyelitis attack and become established in the human race, and it appears that we are now witnessing the adaption of a new virus to the central nervous system of man. This phenomenon is certainly disturbing to the thoughtful physician and constitutes a challenge to research in preventive and curative medicine.

Epidemics of encephalitis have been observed since the influenza pandemic of 1889, the term "Nona" being applied to the disease by the Italians. We then find it appearing in Roumania, in 1915, and along the western front in France, in 1917, usually associated with or following other infections. It was to cases of this type that von Economo applied the designation encephalitis lethargica, which is obviously an unfortunate name since it stresses too greatly one symptom which is not constantly present. These outbreaks occurred in winter or early spring, were usually accompanied by eye symptoms and were very frequently followed by distressing mental and physical sequelae. The acute stage may present very slight symptoms and thus may very easily be overlooked, the patient coming to the physician with the mental impairment or physical signs of the chronic stage, and on careful inquiry giving a

*Broadcast delivered during meeting of Florida Public Health Association, St. Petersburg, December 4-6, 1933.

history of a mild febrile attack with slight and transient symptoms of cerebral involvement. This type of winter encephalitis, which seems to present many points of difference from the summer type, has been designated epidemic encephalitis type A.

In the summers of 1913 and 1918, and again in 1925, there occurred in certain isolated districts in Australia a disease of the central nervous system which was definitely distinct from poliomyelitis and which in many respects resembled this disease as seen in the United States during the past summer. Several outbreaks have occurred around the Inland Sea in Japan, beginning in 1871 and continuing to reach rather serious epidemic proportions during the period 1924-1929. Japanese outbreaks have shown high death rates, disproportionately higher in the older age groups. This high mortality rate may be more apparent than real since in Japan there is probably a tendency to report only deaths and severe cases. The Japanese epidemics have shown the very sharp seasonal incidence of the St. Louis experience, which is entirely unlike the older, better known, winter type.

The first cases in the St. Louis epidemic sickened about the middle of July in St. Louis county, which is an administrative unit distinct from the city but having the same physical relation to the city as usual suburban residential districts. The curve of incidence reached its peak in the county about two weeks before the peak in the city and subsided at about the same rate. The case incidence was much higher in the county than in the city, being 230 and 63 per hundred thousand, respectively. The seasonal distribution of the disease was identical with that shown by the Japanese outbreaks, and entirely unlike type A encephalitis. This is one of the striking characteristics of the disease and also one wherein its epidemiological features strongly resemble poliomyelitis. However, several children who had previously suffered from poliomyelitis have been attacked by this disease; the age incidence and clinical picture are entirely different, and the virus of encephalitis has been established in monkeys with greater difficulty. The pathological picture differs more in localization than in type of reaction to the viruses. As a matter of fact, the histopathological picture in the spinal cord of monkeys infected with encephalitis is sometimes indistinguishable from that of poliomyelitis in these animals.

To date sequelae have not been noted in the St. Louis cases, but considerable time must elapse before it can be stated that mental and physical disturbances do not occur. From the severity of the brain lesions observed in cases which came to autopsy, sequelae could be reasonably expected. Naturally, the most marked lesions are seen in the autopsy room, but we can not be assured that the distressing chronic picture will be absent until many months have passed, since in recovered cases the clinical symptoms indicated that lesions at least approaching those seen in the autopsy material must have been present.

In the St. Louis epidemic, persons under the age of 35 constituted 59% of the population and furnished 36 per cent of the cases while those above this age made up 41 per cent of the population and yielded 64 per cent of the cases. About 20 per cent of the St. Louis cases were fatal, which is in contrast to a 50-60 per cent case fatality rate in Japan. Both morbidity and mortality rates were higher in older people.

It is quite probable that a larger number of mild cases have been counted in St. Louis than is usual in encephalitis epidemics, due to accurate diagnoses and good reporting, which would be reflected in the lower death rate. The question of the presence of numbers of very mild or abortive cases in the population is always a difficult one to answer but in the intensive study of the epidemic, the details of which will not be available for some time, disturbances of any sort which might be related to encephalitis were not found in persons in close contact with cases. Thus, mild attacks which might serve to immunize the population (as is the theory in poliomyelitis immunization) do not seem to occur in summer, or type B, encephalitis.

No characteristic racial or sex differences in susceptibility have been noted, nor did economic status seem to have any influence. Water and milk supplies were studied very carefully and could readily be excluded as having to do with the spread of the infection. The incubation period appears to be from 9 to 14 days.

As pointed out by Leake, the distribution of cases within the metropolitan area of St. Louis was strikingly similar to that of poliomyelitis outbreaks in large urban centers. That portion of the city nearest the Mississippi river and farthest from the suburban area where the first cases were seen, showed the lowest incidence while as one progressed westward toward the suburban

residential area the incidence increased, being highest in St. Louis in those wards directly bordering on the county, and higher still in certain sections of the county. This same feature was observed in other communities.

Muckenfuss, Armstrong, and McCordock, in the Public Health Reports for November 3, 1933, report the establishment of the virus from 7 of 15 fatal St. Louis cases in *Macacus rhesus* monkeys. Subsequent transfers through five passages seemed to indicate a tendency for the virus to be adapted to these animals. The period of incubation varied from 8 to 14 days, and the clinical and pathological pictures observed were consistent with those seen in man. *Cebus* monkeys and rabbits were found to be refractory, but successful inoculations in a special strain of white mice have been reported personally by Webster, of the Rockefeller Institute, and confirmed in stock white mice by Muckenfuss, Armstrong and McCordock. The establishment of the virus in laboratory animals, and particularly in animals as inexpensive and easily handled as mice, suggests great opportunities for immunological studies which may be applied to larger groups of the population.

The long, dry summer in St. Louis and vicinity resulted in the propagation of unusually large numbers of sewage mosquitoes, and the presence of such large numbers of these insects in the suburban areas where the disease first made its appearance directed the attention of the profession to the possibility of the mosquito as a vector. Additional weight was given to the mosquito theory of transmission by the successful experiments of Kelser in transmitting encephalomyelitis of horses by the bite of *Aedes aegypti*. Attempts have been made to transmit encephalitis from human cases in St. Louis to 23 male adults, 3 of whom were officers of the Public Health Service on duty in the study of the St. Louis epidemic and 20 short-term convicts in the Mississippi and Virginia State prisons. While the results of these experiments have not been published, it may be said that all such efforts have been uniformly unsuccessful. Several different species of mosquito were used in these experiments.

As far as our study of the St. Louis epidemic has proceeded, we may definitely rule out water and milk supplies as possible methods of spread of the infection. Mosquitoes as vectors, both from epidemiological data and negative trial in 23 human subjects, are probably not concerned.

For the present, the weight of epidemiological evidence seems to favor the human contact theory as a method of dissemination in the population. With the exception of age incidence, epidemic encephalitis type B, as the St. Louis variety has come to be termed, most closely resembles poliomyelitis in its epidemiological and experimental pathological characteristics. There seems to be no doubt, however, that the viruses are distinct.

Mention should be made of the excellent spirit of cooperation which was everywhere evident during the St. Louis epidemic. The medical profession as a whole, the two great Universities, and the local, State and federal health authorities all functioned as an harmonious whole with the one purpose in mind of care and isolation of the sick and research into the etiology and control of the infection.

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THE NON-SURGICAL RELIEF OF PROSTATIC OBSTRUCTIONS*

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and

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The opportunity of presenting this subject before your Society is one which we genuinely appreciate. While our experiences with this method of relief of prostatic obstruction have been highly gratifying, we do not propose to express enthusiastic predictions nor attempt to draw final conclusions at this time. We intend only to present our results and experiences with more than sixty cases in the past year.

The feasibility of transurethral correction of bladder neck obstructions has long since been recognized, for medical history contains evidence that instruments of this character have been devised and used for the past hundred years. Their usage, however, was not popular because of mechanical shortcomings and consequent technical difficulties. Subsequent improvements made possible by the development of visual mechanisms has transformed the crude originals to instruments of dependability and precision. The construction of the resectoscope, now the instrument

*Read before Escambia County Medical Society, Pensacola, December 5, 1933.

of most modern design, has come through the efforts of Stern, Davis, McCarthy and Kirwin. The instrument of McCarthy has been used in all of the cases of our series. The electrical currents used to energize the cutting electrode and control bleeding are supplied by a number of manufacturers of electrical equipment. They are of two distinct types: *i. e.*, tube and spark gap transformers. Examples of both types have been used in our cases. We have attempted to determine the most satisfactory cutting current by pathological examination of the excised tissues. We have learned in this manner that the undamped current supplied by the tube machine produces the least depth of tissue destruction. This, we feel, is important, since it affords some assurance that subsequent scar formation and contraction is not probable.

It is quite generally known, we believe, that transurethral resection methods, or punch operations, were originally designed and used in median bar types of prostatic obstructions. The method and equipment now in use permit an accurate removal of the glandular hypertrophies which may encroach upon the bladder neck and produce their obstructing influences in a variety of ways. We have included in this group even some of the very large soft adenomatous types of gland which have herniated the internal sphincter and intruded into the bladder. Despite the reasonable success we have had with these cases, we feel that they may be better treated by open surgery. We do not propose with our limited experience to venture an opinion that prostatectomy is obsolete, for we have found it expedient to perform prostatectomy four times during this series. We know of no more promising field for prostatic resection than the carcinomatous obstructing prostate. The opportunity for creating a reasonably comfortable existence by restoring satisfactory urination and avoiding permanent suprapubic drainage alone commends its use. It has been found, too, that the heat transmitted through the cutting electrode has a destructive effect upon the carcinomatous tissue. It is relevant at this point to acknowledge that we know of no more effective treatment of carcinoma of the prostate.

While it is not yet possible to determine the extent in which transurethral resection will supplant prostatectomy, the justification for its continued use is found, we believe, in the fact that thirty-five per cent of all men of prostatic age suffer some form of cardiovascular disease. It is needless to remark that this and other infirmi-

ties of age do not well suit themselves to major surgery and prolonged hospital residence.

We have already heard serious objections expressed against resection; viz: questionable permanency of results, destruction of the continuity of the internal vesical sphincter with its resulting effect upon the function of the trigonal muscle, and a high mortality. It is well known that in selected cases, punch methods for relief of prostatic obstruction has been followed by relief for ten years and longer. It is not reasonable at this time to believe that the accurate correction possible with electro-excision should be less effective. The effect of resection upon the continuity of the internal sphincter is a questionable one. Certainly, the injury or destruction is not greater than that occurring with the enucleation of a large fibro-adenomatous prostate. It has been stated by Alcock that to become an accomplished resectionist, instruction alone will not suffice, but that one must work out his own salvation through a series of at least fifty cases. It is inevitable, then, that through technical errors or errors of judgment the mortality may be excessive during this apprenticeship period. Two of the three deaths occurring in our series came in the first twenty cases. Nor does instrumental dexterity alone assure success for the method. One must have as much appreciation for the physiological and pathological problems involved as in open surgery upon the prostate.

MORTALITY

We are confident that failure to recognize this last important precept was responsible for the loss of one case. Heeding the urging of the patient's physician and family, the operation was done without adequate preliminary preparation and study. This error has not been committed since. In the second case the patient died from an acute hepatic and renal insufficiency, although preliminary cystotomy drainage for two months and meticulous preoperative care had been given. In the third case the patient collapsed following the administration of the spinal anesthetic, and died five hours later.

COMPLICATIONS

The complications are those that have always confronted the prostatectomist. Hemorrhage may be effectually controlled by careful coagulation of all bleeding points at the time of the resection, and the subsequent drainage of the bladder with an inlying catheter of liberal size.

In one case in which close nursing supervision was not provided postoperatively, the catheter became blocked and clotted blood filled the bladder, requiring suprapubic cystotomy. At no other time in our experience has hemorrhage given us serious concern. Epididymitis, which occurs in about eight per cent of the cases, produces no serious concern, as a rule, but causes the patient serious discomfort. In two cases we were obliged to drain the epididymis, and in one, unilateral castration was necessary. Closure of the prostatic surface by tissue coagulation safeguards the patient largely against absorption. It is not unusual for the postoperative course to be afebrile. There is, however, usually a moderate bladder infection which persists for some time after the removal of the catheter, that should be given appropriate treatment.

RESULTS

With the previously noted exceptions, the results have been uniformly satisfactory. One resection has been sufficient in most instances. In three cases we have been obliged to do two resections, and in one case three resections. In several cases, a small amount of residual urine was present for a few days or a week. This most often was accounted for by the obstructive influence of postoperative edema at the vesical neck, and subsided within a week or ten days. If a large residuum remained longer, a second resection was considered necessary. Moderate dysuria and urinary frequency, which invariably follows removal of the indwelling catheter, subside rather rapidly, particularly if care is given to the resulting postoperative cystitis.

SUMMARY

1. The amount of tissue that may be removed by transurethral resection is limitless and must be determined through experience by the operator. The soft adenomatous gland requires the widest and most liberal resection, while the fibrotic or carcinomatous prostate usually requires the least.

2. Transurethral prostatic surgery is not a minor surgical procedure. Preoperative care is as important as has been considered necessary for prostatectomy. The method is not one for the casual instrumenteur, but should be undertaken only by those whose urological and surgical training qualify them to exercise judicious discrimination in the selection of cases and supply prompt decision in an emergency.

3. We feel that transurethral prostatic resection is a most important addition to our urological equipment, and that it should imbue us with a great sense of comfort in biding senescence.

SARCOMA OF THE RECTUM WITH METASTASIS TO THE LIVER.

CASE REPORT*

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and

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Sarcoma of the rectum is rare. About one in every 200 or 250 sarcomata are rectal, and about one rectal malignancy out of each 200 is a sarcoma. A little over 100 are reported in the literature and Weeks states that if the questionable cases were subtracted it is certain that the number would be reduced to nearly one-half.

ANAMNESIS

J. H. K., retired, aged sixty-three years. Complaint: diarrhea, weakness, anorexia, enlargement of abdomen. Family history: unimportant. Past history: In December, 1928, or January, 1929, the patient began to have a sensation of obstruction at stool. A few months later there was periodic bleeding from the rectum. There was no dyschesia at any time, but the patient often reinverted a large "hemorrhoidal" mass after a bowel movement. There were about three bowel movements daily. In November, 1929, the patient noticed for the first time a hard ridge across the epigastrium. He did not consult a physician until February, 1930. One month later a spindle cell sarcoma was removed from his rectum, the tumor being attached to the rectal wall by a fairly large pedicle. Finney removed the tumor and the tissue was examined by Cullen. A few weeks after the operation the patient was referred to Coley for toxin treatment. At this time the liver was exposed to radium. The patient stated that several months later a dark colored fluid was aspirated from the growth in the abdomen.

Operations: Hemorrhoidectomy was performed on patient twenty-five years previously.

Present illness: The patient complained of increasing weakness and a watery diarrhea. He stated he was never nauseated and never vomited. Appetite was poor. Occasional fleeting pains in upper abdomen were noted.

*Read before the Hillsboro County Medical Society, Jan. 3, 1933.

PHYSICAL EXAMINATION

At the time this history was taken, November 2, 1931, the patient presented a picture of fairly advanced cachexia. Temperature and pulse, respiration and blood pressure were normal. Heart sounds were weak and the apices presented no evidence of activity. In the abdomen a large firm mass with uneven surface and reaching to the right iliac crest was palpated. It filled the entire epigastrium, the upper and right half of the umbilical region, and all of the right anterior lumbar region. A few areas of apparent fluctuation were palpated. No inguinal glands were enlarged.

COURSE

The patient died about nine months after this anamnesis. He presented well the signs and symptoms of advancing cachexia. Some derivative of opium was needed continuously to allow sleep, all members of the barbituric acid group causing excitement or failing. About two months before death the patient suddenly—almost overnight—developed edema of the legs and external genitalia. In a short while the edema became general through the body and ascites developed to a marked degree. The patient died of toxemia July 25, 1932, and in a few hours an autopsy was performed.

AUTOPSY

The liver weighed 6,000 grams. Its entire surface was studded with innumerable nodules ranging upwards in size to 6 cm. in diameter. In the right lobe were two large necrotic cavities 15 cm. in diameter, also smaller cavities in the lower portion of the left lobe. On section, the nodules were seen to be composed of interlacing fascicles of elongated cells which were small in size and uniform in shape, with a moderate amount of intercellular substance. The surrounding liver tissue showed a marked increase in connective tissue, which was irregular in its distribution. The rectum was negative, there being no evidence of recurrence of the primary tumor. Histological diagnosis: spindle cell sarcoma.

REMARKS

This case presents a few characteristic features of rectal sarcoma: 1. Sarcomata are situated low down and show a tendency to pedunculate, and obstruct the rectal lumen. 2. Pain is not important and bleeding is late. 3. Inguinal glands are never enlarged with rectal sarcoma. 4. Sarcomata of the rectum metastasize to the liver.

CANCER CONSCIOUS

D. PAUL BIRD, M.D.,
Lakeland.

The early diagnosis of cancer depends upon the supposition that all precancerous lesions may ultimately develop into cancer. If this thought is always kept in mind then many innocent appearing irregularities of the skin and mucous membrane assume more importance. It is not enough to dismiss a patient with the admonition to be careful of a wart or mole but a return date should be set for follow-up examination in all cases of any suspicious nature.

The average patient will delay a visit to a physician unless the importance of examination is impressed upon his mind at the first visit. Here is where the physician can begin his observation and pave the way for the early diagnosis and cure of cancer. It is not unusual in a cancer clinic to see a patient enter for treatment with one-half of his ear, nose or cheek eaten away by a malignant growth. Upon examination he admits that he did not care about the appearance of his face but could no longer stand the pain. Such facts as these throw the burden of care upon the physician first seen and consulted for examination, in the early stages of precancerous growth.

Too much emphasis cannot be placed upon the responsibility of the physician in trying to lower the mortality of cancer. In order to carry his share of this burden he must make himself familiar with the various forms of early cancerous conditions. Such a task is much harder for the general practitioner of medicine than it is for the specialist. After all, it is the general practitioner who has to be a specialist in all his practice.

We must admit that there are some forms of cancer which show no early dependable signs which might alarm an anxious patient. Here the physician, such as in treatment of cancer of the cervix, must depend upon a yearly routine examination and foster a suspicion of all prolonged slow healing conditions.

The mortality of cancer will decrease when the physician assumes a suspicious attitude toward all precancerous conditions and ever keeps in mind what might happen. His alertness and careful consideration of the patient's welfare will result in an early removal of possible malignant degeneration of tissue, and a resulting decrease in the yearly mortality.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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CHANGE

Within the period of practice of all physicians around fifty years of age, many momentous changes have taken place in medical science. Our ancestors described "in minuta" the symptoms and pathology, but the treatment advised so many times was "in the hands of Doctor So and So, this drug was very efficacious," etc., leaving the physician the choice of many drugs, but without much else except the hope that they would be helpful.

Today more and more is the approach to a disease discussed from the experimental and therapeutic side. This added to the older, symptoms approach, gives a more nearly complete picture. It is the experimental method which has yielded us our knowledge of endocrinology and vitamins. The application of thyroid extract in myxedema and the isolation of insulin and its use in diabetes are, we believe, but first steps in organotherapy and, bright with prospects of disease control as it is, we doubt if any one can predict with any accuracy the future in this field. One hundred and thirty-five years ago a way was revealed by Jenner to rid the world of smallpox and now, due to sanitation and preventive medicine, malarial fever, yellow fever, hookworm, typhoid fever, diphtheria, etc., are fast disappearing. But this does not lessen the physician's burden.

We are ever progressive—at least we call all change, progress—and that entails change of environment, habits, contacts and diets with their train of irritations, and added toll on our nervous and physical reserve, resulting in an ever-increasing number of allergic reactions. Among our patients we no longer suspect scurvy; we find urticaria. Medical science drives on, keeping abreast of the changes, and shows why fruit juice banished scurvy and cod liver oil cured and prevented rickets, both of which remedies had been used empirically for years before the word "vitamins" was coined or their presence suspected. This word is as modern as the research which disclosed them and the work is still so new that we can but speculate upon its outcome and what wonders may yet unfold. We believe that there will be those in future generations—taller, stronger and healthier than we—who will look back and point to these as the greatest contributions of the twentieth century to medical science.

In our readings, probably too hit and miss and unfortunately not chronological, we must have gained some ideas, and in our practice observed

some of the triumphs of modern medicine. We have seen, as H. W. Haggard says, "the rise of medicine from mystery to magic and from magic to science—a science exerting today the strongest force in civilization for human betterment, a science that, to those who devote to it their lives, seems almost a religion, one that has as its aims a longer and healthier life; freedom from disease and suffering. And the priests of that religion are our physicians, for although they have laid aside mystery and turned to science, they have never yet discarded from their ethics the religious principles of sacrifice of self to others, principles older than science. The science of the laboratory is being emphasized and advanced because from it has come the science of modern medicine, but no matter how glorious are its potential benefits, how great its contributions, it is not of itself medicine complete.

"As long as human beings remain human beings, art as well as science, the contact of personality, must remain an integral part of the practice of medicine. It is not to the great research worker, nor yet to industry that we turn when in pain, but to the physician, the man. And the physician of today, aided by science and industry, stands as Lowell said 'upon the prow of the ship of civilization.' No longer is he scanning the horizon for the sight of sea monsters and other fabrications of mystery and magic. With chart in hand and scientific instruments of precision at his disposal, he is piloting us toward the peaceful harbor of old age, undisturbed by the terrors which formerly haunted the most intrepid voyager on the sea of life."

The physicians, lovers of their art, change not a whit in their attitude toward the suffering, despite the great change in the art itself. Nor has the attitude of the individuals toward their physician changed much, for when suffering and need arises—whether freethinker, mental healer, scientist or cultist of any description—all turn with pleading faces toward the one whom they would otherwise have had as a family physician.

SPECIAL SOCIETIES

The medical fraternity of Tampa is to be congratulated upon the recent organization of the Tampa Eye, Ear, Nose and Throat Society. The membership is composed of local ophthalmologists and otolaryngologists.

Organizations of this kind should be encour-

aged. The larger cities have had them for years. Florida has several cities where the number of physicians is large enough to justify the forming of these societies. There should be one for each branch of medicine, but meetings should not be held too often. This will bring the men together on a more common ground, stimulate study, encourage more complete case reports and what perhaps is most important, a better understanding of each other. It will create a desire to practice cooperative instead of competitive medicine. Cases reported and studied at these group meetings will make good material for the county and state meetings and as a result material will be developed for better programs in the future.

There is plenty of clinical material all around us, and if we will only group together for study and investigation, the results will be well worth our time and effort.

The Tampa Society will meet once every two months. The program will be arranged to take up one medical problem at each meeting, the subject being assigned to several men for discussion and case reports.

This is better than having sectional meetings in the State Association; it does us all good to get in general meetings and hear papers on various subjects that have been well prepared. Furthermore, our state attendance is too small to cut up into several sections.

It is hoped that other cities in Florida will follow Tampa's example and organize special societies representing the different branches of medicine.

PRE-CONVENTION MEETING

Plans for the annual meeting of the Florida Medical Association, to be held in Jacksonville April 30, May 1 and 2, were arranged at a pre-convention meeting attended by the officers, committeemen and councilors of the Association in Jacksonville, January 21.

During the morning hours, the various committees were in session. A 1 o'clock luncheon was served, this being attended by the officers, committeemen, councilors and six past presidents. Dr. W. M. Rowlett, president of the Association, presided.

Dr. Robert McIver of Jacksonville, general chairman of local committees, told of plans to entertain the Association in Jacksonville. He stated that the various local committees had been appointed and that every effort was being put

forth to make the coming meeting a most successful one.

The councilors were then asked to read their reports. These reports will be published next month.

The following members of the Association were present:

Rowlett, W. M., President, Tampa.
 Pearson, Homer, President-elect, Miami.
 Tillman, G. C., First Vice-President, Gainesville.
 Wells, J. Ralston, Second Vice-President, Daytona Beach.
 Richardson, Shaler, Sec'y-Treas., Jacksonville.
 Thompson, Stewart, Business Manager, Jacksonville.
 Anderson, L. M., Lake City.
 Ashton, W. L., Umatilla.
 Bates, T. H., Lake City.
 Bryans, Herbert, Pensacola.
 Cason, T. Z., Jacksonville.
 Chappell, J. R., Orlando.
 Cook, George, Tampa.
 Dame, George, Inverness.
 Dozier, H. C., Ocala.
 Driskell, S. E., Jacksonville.
 Duke, R. R., Tampa.
 Feaster, O. O., St. Petersburg.
 Gilmer, Eugene R., Tampa.
 Greene, Ralph, Jacksonville.
 Halton, Jack, Tampa.
 Jelks, Edward, Jacksonville.
 Kirby-Smith, J. L., Jacksonville.
 Limbaugh, Louie, Jacksonville.
 McIver, Robert, Jacksonville.
 Moor, F. Clifton, Tallahassee.
 Page, Walter C., Cocoa.
 Palmer, H. E., Tallahassee.
 Palmer, Thomas M., Jacksonville.
 Pittman, J. H., W. Palm Beach.
 Robinson, Leigh F., Ft. Lauderdale.
 Spiers, W. H., Orlando.
 Waas, Frederick, Jacksonville.
 Watson, Herman, Lakeland.
 Whiddon, L. L., Ft. Pierce.
 Winchester, H. E., Dunedin.

REPORT OF COMMITTEE ON REGISTRATION AND PUBLIC POLICY

The activities of the Legislation and Public Policy Committee have been confined largely to the last two weeks of the 1933 session of the State Legislature. Several obnoxious bills were

introduced, the chief of which appears to have been the one permitting privileges to the various cults to hospitals supported wholly or in part by public funds. This bill was reported on favorably by the Public Health Committee of the House but with the co-operation and aid of our men throughout the State we were successful in preventing a vote on this bill.

There is more or less agitation throughout the State looking towards the enactment of a credentials law similar to the one the Association drew up last year. We feel that this is a move forward in that it will prevent the incoming of any individuals to practice any of the so-called healing arts that have not complied with the State act under which they propose to practice.

The State Board of Medical Examiners has had admitted for examination 82 applicants with 6 failures, and 42 applicants were denied the privilege of taking the examination for various reasons.

Respectfully submitted,
S. E. DRISKELL, M.D., Chairman;
JULIEN C. PATE, M.D.,
CORBETT E. TUMLIN, M.D.,
HUGH S. GEIGER, M.D.,
ARTHUR L. WALTERS, M.D.

CONVENTION NOTES

ALUMNI AND FRATERNITY GATHERINGS

Representatives of alumni and fraternity groups who contemplate get-together meetings at the State Convention in Jacksonville are requested to make their wishes known as soon as possible. Arrangements will be made for meeting places for all groups provided sufficient notice is given to the local Committee on Arrangements.

It is necessary to arrange group meetings so they will not conflict with the program of the State Association. Tuesday noon (May 1) has in the past been considered the ideal time. However, if this particular day is not convenient for any group, your Committee will arrange such meetings for Monday noon, April 30.

Your Committee also requests information as to the approximate number who will be expected to attend each group meeting. Communications relative to Alumni and Fraternity Group meetings should be addressed to Dr. Charles B. Mabry, Jacksonville.

ANGLER'S COMMITTEE

Fishing trips for individuals or groups will be

arranged during the annual meeting. Anyone desiring to arrive earlier than the convention date, or stay after the convention will find the Committee at his service. During the convention dates information concerning fishing trips may be secured at the registration desk. Those who wish to arrange trips in advance of the meeting are requested to communicate with Dr. A. H. Wilkinson, Jacksonville, chairman of the Anglers' Committee.

CORRESPONDENCE

The following communication has been received from Marks, Marks, Holt, Gray & Yates, attorneys for the Association:

Florida Medical Association, Inc., Jacksonville. Gentlemen:

It has occurred to us you might be interested in rulings made by the Circuit Court of Duval County recently in two different malpractice cases.

In one of the suits the defendant was a doctor engaged in general practice while in the other the defendant was a dentist.

In each instance, the suit was based upon the alleged negligence of an associate or employee of the doctor in one case and of the dentist in the other and in each instance it was charged that the negligence consisted of acts, omissions or improper treatment by the associate or employee and no charge was made of any improper act or omission by the defendant himself.

In effect, the court held that where doctor number one leaves to doctor number two the treatment of a patient, and the patient submits to treatment by doctor number two, thereby accepting the substitution, and doctor number two exercises his own professional skill and judgment in treating the patient, doctor number one can not be held liable in damages for the negligence or malpractice of doctor number two unless doctor number one personally participated in the negligent treatment of the patient.

In other words, the negligent failure to properly exercise discretion and professional skill and judgment can not be by proxy solely through the medium of the mind of doctor number two so as to render doctor number one liable in damages for malpractice.

We have long contended that the foregoing is the true rule of law and we are much gratified that our local Circuit Court has adopted that view.

MEMBERSHIP ROSTER

FLORIDA MEDICAL ASSOCIATION

CALENDAR YEAR 1933

ALACHUA COUNTY MEDICAL SOCIETY

Summerlin, J. L., President,
1 Baird Bldg. Gainesville
Dell, J. Maxey, Vice-President,
333 W. Main St., So. Gainesville
Summitt, R. E., Vice-President,
335 W. University Ave., Gainesville
Dell, J. Maxey, Jr., Sec'y-Treas.,
333 W. Main St., So. Gainesville
Andrews, Edwin H.,
208 W. Mechanic St. Gainesville
Colson, J. H. Gainesville
DePass, Matthew H.,
E. University Ave. Gainesville
Haskell, Lyman G.,
University of Fla. Gainesville
Hodges, James H.,
234 E. Main St. Gainesville
*King, T. Byron,
332 W. University Ave., Gainesville
Maines, John E., Jr.,
331½ W. University Ave., Gainesville
Snow, Thomas A.,
103 E. University Ave. Gainesville
Thomas, W. C. Gainesville
Tillman, George C.,
431 W. University Ave., Gainesville
Whitaker, C. D. Raiford
Young, Wm. C. Chiefland

BAY COUNTY MEDICAL SOCIETY

Nixon, J. M., Vice-President,
Panama City
Miller, Allen H., Sec'y-Treas. Millville
Fraser, Donald S. Panama City
Roberts, William C. Panama City
Whitfield, J. M. Panama City

BREVARD COUNTY MEDICAL SOCIETY

Creel, W. J., President. Eau Gallie
Hicks, I. K., Sec'y-Treas. Melbourne
Chunn, J. D. St. Cloud
Kenaston, T. C. Cocoa
Page, W. C.,
317 Delannoy Ave. Cocoa
Potthoff, E. W. Titusville
White, Chas. B. Cocoa

BROWARD COUNTY MEDICAL SOCIETY

Peavy, Henry Jackson, President,
505 Nat'l Bank Bldg., Ft. Lauderdale
Butler, B. F., Vice-President,
206 Bank Bldg. Hollywood
Brown, Oliver C., Sec'y-Treas.,
915 Sweet Bldg. Ft. Lauderdale
Blount, Robert E.,
360 S.E. 26th Ave. Ft. Lauderdale
Carter, Donald E.,
915 1st Nat'l Bank Bldg.,
Ft. Lauderdale
Connor, A. B.,
Sweet Bldg. Ft. Lauderdale
Darrow, Anna A.,
310 S.E. 7th St. Ft. Lauderdale
Hendricks, Elliott M.,
314 Sweet Bldg. Ft. Lauderdale
Johnston, John A.,
201 Bryan Court. Ft. Lauderdale
Kinsey, E. T.,
320 N.W. 7th Ave. Miami
Lingeman, Ralph B.,
915 1st Nat'l Bank Bldg.,
Ft. Lauderdale

McClellan, Geo. S. Pompano
McLaury, Elbert,
214-220 1st Nat. Bk. Bldg., Hollywood
Robinson, Leigh F.,
708 Sweet Bldg. Ft. Lauderdale
Roper, Luther E.,
2011 Hollywood Bldg. Hollywood
Skiff, Francis S.,
303 1st Nat'l Bank Bldg.,
Ft. Lauderdale
Stovall, R. H.,
1st Nat. Bk. Bldg. Ft. Lauderdale

COLUMBIA COUNTY MEDICAL SOCIETY

Anderson, Leonidas M., President,
P. O. Box 707. Lake City
Harkness, Robt. B., Vice-President,
605 E. Duval St. Lake City
Bates, Thomas H., Sec'y-Treas.,
Blanche Hotel Annex. Lake City
Brown, Edgar F. Lake City
Ives, Washington M. Lake City
Nichols, W. S. Lake City
Witt, T. W. Lake City

DADE COUNTY MEDICAL SOCIETY

Raap, Gerard, President,
908 Huntington Bldg. Miami
MacDonell, Geo. N., Vice-President,
Box 1861. Miami
Spicer, Robert T., Secretary,
1409 Huntington Bldg. Miami
Barge, H. A., Treasurer,
301-2 Olympia Bldg. Miami
Adkins, E. H.,
Box 253. Miami Beach
Agos, Isadore H.,
903 Huntington Bldg. Miami
Allen, Omer F.,
711 Huntington Bldg. Miami
Amerise, A. Daniel,
Coral Gables Clinic. Coral Gables
Aronovitz, Samuel,
705 Huntington Bldg. Miami
Babcock, Henry C.,
828 Brickell Ave. Miami
Baker, Joel M.,
312-14 Seybold Bldg. Miami
Baker, L. A.,
570 W. Flagler St. Miami
Barfield, J. O.,
312 N. W. Third Ave. Miami
Barge, W. J.,
442-3 Ingraham Bldg. Miami
Bertram, Albert J.,
Blvd. Apts., 936 Biscayne Blvd., Miami
Bible, C. J.,
1203 W. Flagler St. Miami
Black, Nelson M.,
703 Huntington Bldg. Miami
Boughton, Herman,
441 Washington Ave. Miami Beach
Bullard, Clifton P.,
406 N. E. Second Ave. Miami
Burch, R. N.,
2827 N. Miami Ave. Miami
Chambers, Silas E.,
409 Huntington Bldg. Miami
Chandler, G. E.,
Huntington Bldg. Miami
Cleghorn, Charles D.,
Suite 1109 Huntington Bldg., Miami
Conger, Geo. D.,
1600 N. W. 36th St. Miami
Coplan, M. M.,
601 Huntington Bldg. Miami
Couric, Edmonson S.,
P. O. Box 265. Miami
Davis, H. Franklin,
1009 Huntington Bldg. Miami

DeBoe, Michael P.,
Box 505. Miami
Deederer, Carleton,
300 Ingraham Bldg. Miami
Dees, John,
Ingraham Bldg. Miami
DeVore, Louise,
809 Huntington Bldg. Miami
Dobrin, Max,
168 S. E. First St. Miami
Dodge, Percy L.,
812 Huntington Bldg. Miami
Donald, Ernest,
305 Huntington Bldg. Miami
Dunaway, Carl E.,
1209 Huntington Bldg. Miami
Du Puis, J. G.,
Lemon City. Miami
Elder, Samuel F.,
Huntington Bldg. Miami
Elgin, Lee W.,
702 Huntington Bldg. Miami
Ellis, Wm. H.,
Ingraham Bldg. Miami
Eskeew, Don C.,
Ingraham Bldg. Miami
Faver, R. Marshall,
127 N. E. 5th St. Miami
Fitzgerald, Willard Lee,
504 Huntington Bldg. Miami
Flipse, M. Jay,
305 Huntington Bldg. Miami
Fox, H. H.,
Box 2523. Miami
Foxworthy, F. W.,
1009 Huntington Bldg. Miami
Franklin, Grover C.,
Box 75. Coconut Grove
Freeman, Mary. Perrine
French, Elmo D.,
603 Huntington Bldg. Miami
Gammage, Tom Rogers,
221 N. E. 5th St. Miami
Ghertler, Max,
1715 S. W. 11th St. Miami
Goodson, W. M.,
Ingraham Bldg. Miami
Gowdy, Francis A.,
409 Ingraham Bldg. Miami
Gowdy, Ralph A.,
925 Lincoln Road. Miami Beach
Gowe, Donald F.,
N.E. 2nd Ave. & 36th St. Miami
Graves, J. Raymond,
709 Huntington Bldg. Miami
Grimes, Dewey H.,
Box 377. South Miami
Haggard, Wm. Andrew,
1101 Huntington Bldg. Miami
Hall, E. J.,
201 Venetian Bldg. Miami
Hall, John E.,
Box 2722. Miami
Hanna, Fouad H.,
care Royal Consul of Egypt,
103 Park Ave., N. Y. City, New York
Harris, David W.,
403 Huntington Bldg. Miami
Harris, Robt. Miller,
1010 Huntington Bldg. Miami
Hatch, Ernest B.,
71 N. E. 11th St. Miami
Heck, Maurice E.,
216 N. E. 2nd Ave. Miami
Hodges, John W.,
Grallynn Hotel. Miami
Hodsdon, Benj. F.,
Box 923. Miami
Hodsdon, L. A.,
418-420 Security Bldg. Miami
Holmes, Albert G. H.,
414 N. E. 1st Ave. Miami
Holmes, Roy J.,
601 Huntington Bldg. Miami
Hotchkiss, W. T.,
Aladdin Bldg. Miami Beach
Hutson, Thos. W.,
309 Huntington Bldg. Miami

*Deceased.

†Honorary Member.

Ingersoll, J. M.,
1700 S. Bayshore Lane.....Miami
Jeffrey, S. L.,
4022 Douglas Road.....Miami
Jenkins, Leslie M.,
712 Huntington Bldg.....Miami
Jenkins, Paul K.,
Box 35Miami Beach
Jones, Allan,
337 Lincoln Road.....Miami Beach
Jones, Walter C., Jr.,
Huntington Bldg.Miami
Keeler, Frank L.,
1106 Huntington Bldg.....Miami
Keely, J.,
2307 N.E. 4th Ave., Chester
Apts.Miami
Kemp, Austin J.,
207-10 Congress Bldg.....Miami
Kennon, Chas. L.,
411-12 Huntington Bldg.....Miami
Kirsch, Maxwell D.,
408 Huntington Bldg.....Miami
Lanier, W. T.,
336 Ingraham Bldg.....Miami
Leavitt, H. A.,
127 N. E. 5th St.....Miami
Lefholz, Rothwell,
1009 Huntington Bldg.....Miami
Lewis, Taylor,
302-4 Congress Bldg.....Miami
Light, S. D. W.,
Ingraham Bldg.....Miami
Lithgow, Wm. D.,
245 N. E. 25th St.....Miami
Litterer, Ammon B.,
309 Huntington Bldg.....Miami
Lott, Young C.,
144 N. E. 2nd Ave.....Miami
Lowe, Eugene C.,
258 N. E. 21st St.....Miami
Lucinian, Joseph H.,
404 Huntington Bldg.....Miami
Luke, J. M. J.,
Congress Bldg.....Miami
Lustgarten, A.,
550 West End Ave.....N. Y. City
Lyell, Robert O.,
310 Huntington Bldg.....Miami
McGunagle, J. E.,
1885 W. Flagler St.....Miami
McKenzie, E. N.,
336 Ingraham Bldg.....Miami
McKibben, Wm. W.,
316-318 Ingraham Bldg.....Miami
Manson, Plumer J.,
Rosetta Theatre Bldg...Little River
Martin, M. C.,
548 W. Flagler St.....Miami
Maxwell, E. B.,
610 Huntington Bldg.....Miami
Maxwell, Leslie H.,
835 Lincoln Road.....Miami Beach
Medlin, Willard B.,
502 Security Bldg.....Miami
Mentzer, Claude,
46 N. E. 5th St.....Miami
Milton, J. D.,
905 Huntington Bldg.....Miami
Moore, T. E.,
Huntington Bldg.....Miami
Morrow, Frank R.,
305 Huntington Bldg.....Miami
Newell, C. E.,
21 S. W. 12th Ave.....Miami
Nichol, E. Sterling,
305 Huntington Bldg.....Miami
Nichols, Frank O.,
37 N. W. 1st St.....Miami
Norton, Richard C.,
Battle Creek Sanit., Miami Springs
O'Quinn, Leon H.....Hialeah
Otto, T. O.,
704 Huntington Bldg.....Miami
Owens, Duncan,
337 Lincoln Road.....Miami Beach
Palmer, Bascom H.,
502 Huntington Bldg.....Miami
Panettiere, Cayetano,
Aladdin Bldg.Miami Beach
Pauk, Geo. A.,
202 Venetian Bldg.....Miami
Payne, J. W.,
203 Venetian Arcade.....Miami
Payton, Frazier J.,
Allison Hospital.....Miami Beach
Pearson, Homer Lee, Jr.,
1108 Huntington Bldg.....Miami
Pearson, John R.,
205 Bedford Bldg.....Miami
Pearson, Nelson T.,
1109 Huntington Bldg.....Miami
Pearson, Rufus J.,
Huntington Bldg.....Miami

Pepper, Max,
715 Seybold Bldg.....Miami
Perry, C. Larimore,
509 Huntington Bldg.....Miami
Peters, Edgar,
506 Olympia Bldg.....Miami
Phillips, Kenneth,
610 Huntington Bldg.....Miami
Preston, E.,
St. Francis Hospital..Miami Beach
Quillian, Warren,
Coral Gables Clinic....Coral Gables
Rentz, L. S.Coconut Grove
Rentz, Wm. C.,
1744 N. W. 36th St.....Miami
Repas, Robert E.,
337 Lincoln Road.....Miami Beach
Richardson, John R.,
Lincoln Road.....Miami Beach
Roberts, S. J.,
46 N. E. 5th St.....Miami
Roche, Chas. F.,
Aladdin Bldg.....Miami Beach
Rogers, Hunter Beall,
27 N. W. 12th Ave.....Miami
Ryan, Harold A.,
Aladdin Med. Arts Bldg.,
Miami Beach
Sayles, Charles F.,
311 N. W. 3rd St.....Miami
Seeds, J. B.,
544 W. Flagler St.....Miami
Shaw, E. Clay,
702 Huntington Bldg.....Miami
Shisler, J. W.,
218 Shoreland Bldg.....Miami
Silverman, Harry Z.,
760 Collins Ave.....Miami Beach
Sinclair, J. A. B.,
275 N. E. 23rd St.....Miami
Skaggs, P. T.,
510 1st Nat. Bk. Bldg.....Miami
Smith, C. Kirby,
210 E. Flagler St.....Miami
Smith, J. A.,
210 E. 5th St.....Homestead
Smith, J. W.,
1661 W. Flagler St.....Miami
Smith, Marvin,
405-6 Huntington Bldg.....Miami
Snyder, John W.,
402 Huntington Bldg.....Miami
Stewart, J. S.,
1105 Huntington Bldg.....Miami
Strong, C. J.,
605 S. W. 5th Ave.....Miami
Stuart, J. D.,
227 N. E. 5th St.....Miami
Tallman, Maurice H.,
1401 Huntington Bldg.....Miami
Thomas, Edwin C.,
46 N. E. 5th St.....Miami
Thomas, Kelly C.,
318 N. W. 1st St.....Miami
Thomas, Merrick D.,
211 6th St.....Miami Beach
Thorne, James I.,
Hotel Europe.....Athens, Greece
Threlkeld, Major Edgar,
Congress Bldg.....Miami
Tower, John B.,
32 No. Krome Ave.....Homestead
Tumlin, Corbett E.,
Ingraham Bldg.....Miami
Turner, John C.,
Tatum Bldg.Miami
Vinson, Willie J.,
400 Ingraham Bldg.....Miami
Vogt, Ferdinand A.,
Huntington Bldg.....Miami
Walker, Harrison A.,
704 Lincoln Road.....Miami Beach
Walters, Arthur L.,
337 Lincoln Road.....Miami Beach
Watters, W. H.,
Boston-Miami Clinic, Coconut Grove
Weiland, A. H.,
227 Aragon Ave.....Coral Gables
Weinkle, Barney,
512 Olympia Bldg.....Miami
Welch, P. B.,
Huntington Bldg.Miami
Westermann, Julius T.,
Box 1542, Buena Vista Sta., Miami
White, D. Ward,
347 Lincoln Road.....Miami Beach
Whitten, Benj. L.,
Box 505Miami
Wilson, M. C.,
809 Huntington Bldg.....Miami
Withers, G. H.,
Aladdin Med. Arts Bldg., Miami Beach
Wood, Arthur W.,
401 Security Bldg.....Miami
Woodard, Robert C.,
Jackson Memorial Hospital..Miami

Wright, Sheffield,
60 N. E. 46th St.....Miami
Youmans, Corren P.,
653 S. W. 2nd St.....Miami
Youmans, I. C.,
653 S. E. 2nd St.....Miami

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

Highsmith, G. F., Vice-President, Arcadia
Martin, Leldon W., Sec'y-Treas., Sebring
Bevis, Henry P.....Arcadia
Chandler, Isaac W.,
First Trust Bldg.....Avon Park
Kayton, M. C.Wauchula
McKnight, Geo. Scott,
Jacaranda Arcade.....Avon Park
Simmons, S. J., Jr.....Belle Glade
Spears, Ben D.....Wauchula
Weems, Howard V.,
22 Oak St.Sebring

DUVAL COUNTY MEDICAL SOCIETY

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712 Laura St.....Jacksonville
Morris, Kenneth A., Vice-President,
Professional Bldg.....Jacksonville
Fort, Frank L., Secretary,
312 Medical Arts Bldg., Jacksonville
Swift, Edwin C., Treasurer,
2033 Riverside Ave.....Jacksonville
Adams, George E.,
2017 Main St.....Jacksonville
Adams, Thos. S.,
612 Lynch Bldg.....Jacksonville
Alford, Neil,
St. James Bldg.....Jacksonville
Arms, B. L.,
P. O. Box 353...Farmington, Maine
Bacon, Henry,
2737 Vernon Terrace...Jacksonville
Baker, R. M.,
Professional Bldg.....Jacksonville
Barfield, Frederick G.,
St. James Bldg.....Jacksonville
Bayless, W. C.,
202 St. James Bldg....Jacksonville
Beckman, Geo. E.,
Professional Bldg.....Jacksonville
Black, J. B.,
St. James Bldg.....Jacksonville
Boone, James L.,
500 Professional Bldg..Jacksonville
*Boyd, John E.,
342 St. James Bldg....Jacksonville
Bransford, L. E.,
Professional Bldg.....Jacksonville
Brink, F. A.,
Box 4479.....Jacksonville
Brinson, P. A.....Baldwin
Brinson, W. D.Baldwin
Broadbent, Oliver P.,
1022 Park St.....Jacksonville
Brown, Alan DeWitt,
417 St. James Bldg....Jacksonville
Bryant, James Malone,
303 Medical Arts Bldg...Jacksonville
Carefoot, E. I.,
Professional Bldg.....Jacksonville
Cason, Turner Z.,
2033 Riverside Ave.....Jacksonville
Chapman, Benjamin A.,
2151 Pearl St.....Jacksonville
Chilli, Joseph L.,
401 St. James Bldg....Jacksonville
Collins, C. C.,
1855 Laura St.....Jacksonville
Copeland, Silas M.,
203 St. James Bldg....Jacksonville
Copp, F. A.,
458 St. James Bldg....Jacksonville
Croft, Theodore G.,
St. James Bldg.....Jacksonville
Cunningham, Lester W.,
St. James Bldg.....Jacksonville
Day, Gaston,
310 W. Church St.....Jacksonville
Dean, Russell,
St. James Bldg.....Jacksonville
Drew, Horace R.,
St. James Bldg.....Jacksonville
Driskell, Simon E.,
St. James Bldg.....Jacksonville
Dyrenforth, Lucien Young,
413 Medical Arts Bldg..Jacksonville
Eaton, Paul,
State Board of Health..Jacksonville

*Deceased.

†Honorary Member.

Enneis, F. B.,
Professional Bldg.....Jacksonville
Erwin, Stanley,
1001 Lynch Bldg.....Jacksonville
Field, Thomas S.,
712 Laura St.Jacksonville
Gammon, Julian E.,
700 Professional Bldg..Jacksonville
Goodale, Banks H.,
St. James Bldg.....Jacksonville
Gorman, John M.,
424 St. James Bldg....Jacksonville
Greene, Ralph N.,
Medical Arts Bldg.....Jacksonville
Gurganious, Allen P., Green Cove Spgs.
Hanson, Henry,
State Bd. of H'th Bldg., Jacksonville
Harrell, D. E.,
St. James Bldg.....Jacksonville
Harris, Herrman H.,
608 Greenleaf & Crosby Bldg.,
.....Jacksonville
Harris, W. G.,
St. James Bldg.....Jacksonville
Hartman, James H.,
546 Lomax St.....Jacksonville
Hayes, J. W.,
309 Professional Bldg..Jacksonville
Henley, Chas. F.,
2151 Pearl St.....Jacksonville
Henson, Graham E.,
201-2 St. James Bldg..Jacksonville
Holden, Gerry R.,
Medical Arts Bldg.....Jacksonville
Holloway, L. W.,
359 St. James Bldg....Jacksonville
Horne, Hendley F.,
325 W. Duval St.....Jacksonville
Humphreys, David G.....Fernandina
Ira, Gordon H.,
452 St. James Bldg....Jacksonville
Ives, Harold A.,
711 Roselle St.....Jacksonville
Jelks, Edward,
Riverside Hospital....Jacksonville
†Jennings, C. L.,
Medical Arts Bldg.....Jacksonville
Jones, F. C.,
Graham Bldg.....Jacksonville
Keisling, Frederick C.,
315 Professional Bldg..Jacksonville
Killinger, Raymond R.,
St. James Bldg.....Jacksonville
Kirby-Smith, Joseph L.,
511-15 Greenleaf & Crosby Bldg.
.....Jacksonville
Kirk, Wm. W.,
608 Greenleaf & Crosby Bldg.
.....Jacksonville
Knauer, W. Jerome,
Buckman Bldg.....Jacksonville
Knight, A. Comer,
Professional Bldg.....Jacksonville
Krueger, Frederick W.,
452 St. James Bldg....Jacksonville
Limbaugh, Louie M.,
458 St. James Bldg....Jacksonville
McEuen, H. Bernard,
320 Professional Bldg..Jacksonville
McGinnis, Robt. H.,
2063 Oak St.Jacksonville
McIver, Robt. B.,
St. James Bldg.....Jacksonville
McKenzie, Albert C.,
St. James Bldg.....Jacksonville
Mabry, C. B.,
St. James Bldg.....Jacksonville
Manhoff, Ben.,
712 Laura St.....Jacksonville
Manning, Wm. S.,
310 Greenleaf & Crosby Bldg.
.....Jacksonville
Martin, P. H.,
Professional Bldg.....Jacksonville
May, Robert D.,
302-5 Prof. Bldg.....Jacksonville
Milam, Ernest B.,
Medical Arts Bldg.....Jacksonville
Mitchell, Geo. M.,
712 Laura St.....Jacksonville
Mitchell, John H.,
300 Professional Bldg..Jacksonville
Moe, Leonard N.,
212 St. James Bldg....Jacksonville
Morgan, Thomas E.,
4528 Royal Ave.....Jacksonville
Morris, S. A.,
237 W. Duval St.....Jacksonville
Norris, Samuel R.,
Medical Arts Bldg.....Jacksonville
Norwood, J. K.,
211 St. James Bldg....Jacksonville
Oberdorfer, Aaron Z.,
409 St. James Bldg....Jacksonville

Oetjen, G. F.,
211 E. Forsyth St.....Jacksonville
Owens, J. H.,
1855 Laura St.....Jacksonville
Palmer, Thomas M.,
2063 Oak St.....Jacksonville
Parramore, James B.,
401 St. James Bldg....Jacksonville
Pasco, J. D.,
Medical Arts Bldg.....Jacksonville
Peterson, C. A.,
St. James Bldg.....Jacksonville
Peyton, Harry A.,
2033 Riverside Ave....Jacksonville
Porter, H. W.,
340 St. James Bldg....Jacksonville
Proctor, Harper L.,
512 Greenleaf & Crosby Bldg.
.....Jacksonville
Quasser, Adolph Bernard,
404 Medical Arts Bldg., Jacksonville
Ramage, Raymond B.,
219-20 Prof. Bldg.....Jacksonville
Randolph, J. H.,
St. James Bldg.....Jacksonville
Richards, Ferdinand,
1022 Park St.....Jacksonville
Richardson, George W.,
343 St. James Bldg....Jacksonville
Richardson, Shaler,
111 W. Adams St.....Jacksonville
Rogers, W. W.,
Professional Bldg.....Jacksonville
Rollins, Clarence D.,
2104 Riverside Ave....Jacksonville
Royce, Clayton E.,
Medical Arts Bldg.....Jacksonville
Sanderson, Raymond,
216 Professional Bldg., Jacksonville
Sandusky, C. M.,
28 W. Monroe St.....Jacksonville
Schnauss, William R.,
312 Hildebrandt Bldg., Jacksonville
Schneider, David,
Greenleaf & Crosby Bldg.
.....Jacksonville
Sellers, E. T.,
412-13 St. James Bldg., Jacksonville
Sengstak, Ernst P. E.....Mandarin
Shaw, W. M.,
St. James Bldg.....Jacksonville
Stinson, W. M.,
1611 Aberdeen St.....Jacksonville
Stollenwerk, A. D.,
25 W. Beaver St.....Jacksonville
Taylor, H. Marshall,
111 W. Adams St.....Jacksonville
Teeter, Edmund H.,
305 St. James Bldg....Jacksonville
Thomas, Robert Y. H.,
502-4-6 Lynch Bldg....Jacksonville
Thompson, David C.,
2579 Herschell St.....Jacksonville
Thompson, T. C.,
318 Hildebrandt Bldg..Jacksonville
Tyler, Lockland Vance,
San Marco Square, So. Jacksonville
Upchurch, Noble A.,
City Board of Health...Jacksonville
Van Schaick, Harold D.,
210 St. James Bldg....Jacksonville
Veal, Ernest W.,
128 St. Johns Ave., So. Jacksonville
Waas, F. J.,
Professional Bldg.....Jacksonville
Washburn, Clayton D.,
St. James Bldg.....Jacksonville
Weaver, W. N.,
214 Rugby Road....University, Va.
Wilcox, Clarence R.,
712 Laura St.....Jacksonville
Wilkinson, Albert H.,
313 Professional Bldg., Jacksonville
Wilson, Alpheus K.,
334 St. James Bldg....Jacksonville
Wilson, J. F.,
310-12 Greenleaf & Crosby Bldg.,
.....Jacksonville
Woolsey, Bertram F.,
320-21 St. James Bldg., Jacksonville
Wynn, Robt. S.,
305 Consol. Bldg.....Jacksonville

ESCAMBA COUNTY MEDICAL SOCIETY

Heinberg, Chas. J., President, Pensacola
White, Alwyn W., Vice-President,
Box 1345.....Pensacola
Hoffman, James M., Secretary,
6 W. Chase St.Pensacola
Ames, Allen M.,
206 Blount Bldg.....Pensacola

Anderson, Warren E.,
511 Am. Nat. Bank Bldg., Pensacola
Bell, John D.,
305 Blount Bldg.....Pensacola
Blackshear, T. E.,
406-7-8 Amer. Nat. Bk. Bldg.
.....Pensacola
Born, Chas. C.,
513 Blount Bldg.....Pensacola
Bryan, H. L.,
21½ E. Wright St.....Pensacola
D'Alemberte, Clinton W.,
302 Am. Nat. Bk. Bldg., Pensacola
Daniels, J. P.,
313 Brent Bldg.Pensacola
Dodson, M. W.,
Box 57Alafloa, Ala.
Fellows, J. H.,
Brent Bldg.Pensacola
Fisher, Luther C., Jr.,
21½ E. Wright St.....Pensacola
Gachet, Nacy L.....Century
Haisfield, Abram R.,
311 Blount Bldg.....Pensacola
Haisfield, H. B.,
311 Blount Bldg.....Pensacola
Holley, John C.Milton
Kennedy, S. G.,
511-12 Am. Nat. Bk. Bldg.
.....Pensacola
Lischkoff, Mozart A.,
Blount Bldg.Pensacola
McGuire, J. J.,
Pensacola Hospital.....Pensacola
McLane, J. N.,
204 W. Brainard St.....Pensacola
Mock, A. E.,
314 Blount Bldg.....Pensacola
Nobles, R. G.,
Blount Bldg.Pensacola
Nobles, V. R.,
Blount Bldg.Pensacola
Nobles, W. D.Pensacola
Payne, W. C.,
Blount Bldg.Pensacola
Pierpont, Juriah H.,
511 Am. Nat. Bk. Bldg., Pensacola
Quina, M. E.Pensacola
Renshaw, F. G.,
104 S. Palafox St.....Pensacola
†Simpson, Horace L.,
20 W. Belmont.....Pensacola
Stokes, Thos. H.,
Theisen Bldg.....Pensacola
Sullivan, Rosa L.,
1016 W. Chase St.....Pensacola
Thames, J. G.Milton
Thames, RufusMilton
Turberville, J. I.Century
Turberville, John S.Century
Turner, John B.Bagdad
Webb, Carol C.,
303 Blount Bldg.....Pensacola

HILLSBORO COUNTY MEDICAL SOCIETY

McRae, E. H., President,
402 Citrus Ex. Bldg.....Tampa
Smoak, Edw., Vice-President,
315 Citizens Bk. Bldg.....Tampa
Bartlett, Chas. W., Secretary,
Box 5512Tampa
Adamson, William P.,
610 Citizens Bk. Bldg.....Tampa
Allen, Bundy,
302 Citizens Bk. Bldg.....Tampa
Alsbrook, John W.,
120 N. Collins St.....Plant City
Andrews, Chadbourne A.,
715 Citizens Bk. Bldg.....Tampa
Barker, Frank T.,
302 Krause Bldg.....Tampa
Beyer, A. R.,
Box 527Tampa
Bidwell, Alfred M.,
401 1st Nat. Bk. Bldg.....Tampa
Bitzer, Emory W.,
815 Citizens Bk. Bldg.....Tampa
Black, Robert C.,
101 San Ever St.Plant City
Blackmon, H. J.,
Citizens Bank Bldg.....Tampa
Blake, W. C.,
412 Citizens Bank Bldg.....Tampa
Boling, John Radford,
1207-11 1st Nat. Bk. Bldg..Tampa
Bottari, Giulio C.,
1829½ Seventh Ave.....Tampa
Brown, Harold O.,
215 Madison St.Tampa

*Deceased.

†Honorary Member.

Carlton, Leland F.,
805 Citizens Bank Bldg.....Tampa
Chandler, J. C.,
410 Citrus Exch. Bldg.....Tampa
Cook, Geo. L.,
906 So. Rome Ave.....Tampa
Coward, James T.,
906 So. Rome Ave.....Tampa
Dickinson, Joshua C.,
302 Citizens Bk. Bldg.....Tampa
Draper, Arthur D.,
5607 Florida Ave.Tampa
Duke, Roncie R.,
708 Citizens Bk. Bldg.....Tampa
Duncan, Wm. Peyton,
802 Tampa Theatre Bldg.....Tampa
Dyer, Walter H.,
1801½ 22nd St.Tampa
Efrd, Lester J.,
Box 2519Tampa
Ely, R. A.,
404½ Zack St.Tampa
Estes, J. L.,
815 1st Nat. Bk. Bldg.....Tampa
Etheredge, S. H.,
706 Franklin St.Tampa
Forbes, Sherman B.,
409 Citizens Bank Bldg.....Tampa
Garcia, Parsons M.,
Box 7224West Tampa
Gilbert, Elsie,
6508 Central Ave.Tampa
Gilmer, Eugene S.,
416 Citizens Bk. Bldg.....Tampa
Goldcn, Harold M.,
30 No. Michigan Ave., Chicago, Ill.
Grable, James S.,
822 Citizens Bank Bldg.....Tampa
Grantham, James M.,
442 Lafayette Arcade.....Tampa
Guerra, Julio J.,
1st Nat. Bank Bldg.....Tampa
Hardy, G. E. W.,
818 1st Nat. Bk. Bldg.....Tampa
Helms, John S., Jr.,
Box 1439Tampa
Henderson, Robt. F.,
612 Citizens Bk. Bldg.....Tampa
Higgins, Allen F.,
814 So. Orleans Ave.....Tampa
Hopkins, Clack D.,
1818 Hills Ave.Tampa
Jenson, Henry J.,
7303 Nebraska Ave.Tampa
Knauf, A. R.,
706 Franklin St.Tampa
Lancaster, Wm. J.,
Box 3010Tampa
Lowrv, Blackburn W.,
408 Citrus Exchange Bldg..Tampa
McEachern, J. R.,
Box 2214Tampa
Maguire, Thomas C.,
104 S. Collins St.....Plant City
Maner, Geo. R.,
5111 Central Ave.Tampa
Martin, Douglas D.,
906 So. Rome Ave.....Tampa
Martorell, Abelardo,
Citizens Bk. Bldg.....Tampa
Metzger, Frank C.,
916-17 Citizens Bk. Bldg.....Tampa
Mills, Herbert R.,
706 Franklin St.Tampa
Mitchell, L. B.,
Box 1020Tampa
Moore, J. T.,
317 Tribune Bldg.....Tampa
Nelson, Robert G.,
712 Citizens Bk. Bldg.....Tampa
†Oppenheimer, Louis S.,
108 Crescent Place.....Tampa
Ortega, Rafael,
Box 5513, Ybor Sta.....Tampa
Pate, Julien C.,
1107-9 1st Nat. Bk. Bldg....Tampa
Patterson, William,
312 Citrus Exch. Bldg.....Tampa
Pearson, R. J.,
Route 1, Box 198.....Tampa
Rowlett, W. M.,
Box 786Tampa
Saxton, J. J.,
315 Citrus Exch. Bldg.....Tampa
Shaver, E. F.,
1801½ 22nd St.Tampa
Smith, H. Mason,
903 Tampa Theatre Bldg....Tampa
Spengler, Nathaniel L.,
903 Tampa Theatre Bldg....Tampa
Spoto, Joseph S.,
1829½ E. Broadway.....Tampa
Stone, Alvord L.,
102 E. Hillsboro Ave.....Tampa

Taylor, Joseph W.,
Room 807, 706 Franklin St., Tampa
Torbett, R. S.,
409 F. N. B. Bldg.....Tampa
Truelson, Thomas,
Room 605, 706 Franklin St..Tampa
Vinson, J. C.,
215 Madison St.Tampa
Weekley, Augustine S.,
401 City Bank Bldg.....Tampa
Young, C. T.Plant City

JACKSON COUNTY MEDICAL SOCIETY

Dowling, J. B., President.....Alliance
Ryals, C. H., Vice-President, Grandridge
Pierce, J. Lewis, Sec'y-Treas..Marianna
Baltzell, N. A.....Marianna
McKinnon, Daniel A.....Marianna

LAKE COUNTY MEDICAL SOCIETY

Ashton, W. Lee, Sec'y-Treas...Umatilla
Colley, Sanford C.Tavares
Conklin, Raymond C.,
141 W. 6th Ave.....Mount Dora
Coupland, James D.Eustis
DeVane, W. G.Groveland
Fenn, Harry T.Mount Dora
Hannum, M. M.Eustis
Hawkins, A. S.,
779 Montrose St.....Clermont
Holland, Howard G.,
Suite 202 State Bk. Bldg., Leesburg
Izlar, A. L.Clermont
Toy, Samuel H.Umatilla
Tyre, C. McK.Eustis
Williams, Rabun H.,
Theatre Bldg.Eustis
Wood, Will L.Mount Dora

LEE COUNTY MEDICAL SOCIETY

Jones, H. Quillian, President,
18-19-20 Leon Bldg.....Ft. Myers
Bostelman, Ernest, Vice-President
201 Pythian Bldg.....Ft. Myers
Newton, Robley D., Sec'y-Treasurer,
5-6 Earnhardt Bldg.....Ft. Myers
Grace, William H.,
15 Earnhardt Bldg.....Ft. Myers
Harrison, Warren A.,
Pythian Bldg.Ft. Myers
Jones, J. William.....Ft. Myers
Longbrake, Guy A.,
308 2nd St.Ft. Myers
Merrick, Chas. Gordon,
26 Leon Bldg.Ft. Myers

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON COUNTY MEDICAL SOCIETY

Wilkinson, B. A., President,
Telephone Bldg.....Tallahassee
Pound, J. H., Vice-Pres..Chattahoochee
Kendrick, Odis G., Sec'y-Treasurer
.....Tallahassee
Barnes, Benjamin F.River Junction
Davis, Julius C.,
203-8 Masonic Bldg.....Quincy
Dozler, L. L.Tallahassee
Godard, Robt. F.,
Key Bldg.Quincy
Graves, L. J.,
Box 623Tallahassee
Johnston, John K.,
Exchange Bank Bldg...Tallahassee
McClure, Herbert A.,
State Board of Health Bldg.
.....Tallahassee
Mols, Edith P.,
Fla. State College.....Tallahassee
Moor, Clifton,
Telephone Bldg.Tallahassee
Palmer, Henry E.,
408 South Adams St....Tallahassee
Rhodes, Bricey M.,
121 E. College Ave.....Tallahassee
Salley, Samuel Marion.....Tallahassee
Willhoit, Sterling E.....Quincy

MANATEE COUNTY MEDICAL SOCIETY

English, A. Q., Secretary.....Palmetto
Blake, Lowrie W.....Bradenton
Floyd, A. J.Palmetto
Gates, Hubbard,
F. O. Box 245.....Bradenton
Hollingsworth, Samuel G.,
451 12th St.Bradenton
Lancaster, B. M.Manatee
Larrabee, Chas. W.,
Larrabee Hospital.....Bradenton
McDuffee, Tolliver M.Manatee
Mason, John F.Bradenton
Sugg, Wm. D.,
Bradenton Bank Bldg....Bradenton

MARION COUNTY MEDICAL SOCIETY

Strange, J. L., President.....McIntosh
Freeman, Albert H., Vice-Pres., Ocala
Chalker, James L., Sec'y-Treasurer,
719 E. Ocklawaha Ave.....Ocala
Brown, Andrew G.Dunellon
Cammack, K. R.Gulf Hammock
Cumming, Richard C.,
Commercial Bank Bldg.....Ocala
Dozler, Henry C.,
9 No. Magnolia St.....Ocala
Ferguson, R. D.,
Box 802Ocala
†Hood, J. W.Ocala
Lindner, E. G.Ocala
Lisk, Percy F.Ft. McCoy
Moore, J. N.,
210-12 Professional Bldg....Ocala
Peek, Eugene G.,
Commercial Bk. & Tr. Bldg., Ocala
Wallis, Thos. H.,
104 S. Magnolia St.....Ocala
Watt, Harry F.,
Box 146Ocala

MONROE COUNTY MEDICAL SOCIETY

Galey, Harry C., President,
532 Fleming St.....Key West
*Plummer, Geo. R., Vice-President,
504 Simonton St.....Key West
Warren, Wm. R., Sec'y-Treasurer,
511 Eaton St.Key West
Fina, RicardoKey West

ORANGE COUNTY MEDICAL SOCIETY

Johnston, Hewitt, President,
31 W. Washington St.....Orlando
Chappell, John R., Vice-President,
Box 1370Orlando
Orr, Louis M., Jr., Secretary,
311 Exchange Bldg.....Orlando
Collins, Chas. J., Treasurer,
209-12 Exchange Bldg.....Orlando
Andrews, Mitchell M.,
Box 1817Orlando
Beardall, Harold M.,
147 E. Church St.....Orlando
Brinson, HaynesKissimmee
Buff, Julian H.,
49 N. Orange Ave.....Orlando
Burks, B. Auxford,
108 E. Park Ave.....Winter Park
Butler, Paul T.,
23 Autrey Arcade.....Orlando
*Carroll, ColeApopka
Chiles, J. H.Apopka
Christ, Calvin D.,
Box 1137Orlando
Day, Horace A.,
209-12 Exchange Bldg....Orlando
Dodds, Wm. H.,
11th St. & Penn. Ave.....St. Cloud
Edwards, Gaston H.,
106-10 E. Central Ave.....Orlando
Folsom, Spencer A.,
11 Lucerne Circle.....Orlando
Gardner, J. F.Winter Park
Geiger, Hugh St. C.,
24½ Broadway.....Kissimmee

*Deceased.

†Honorary Member.

Gray, Frank D.,
311-12 Exchange Bldg. Orlando
Gwynn, Humphrey W.,
Clinic Bldg. Orlando
Harms, F. H.,
40 N. Orange St. Orlando
Hart, Ruth S. Winter Park
Hoffmann, Carl D.,
25-27 Autrey Arcade. Orlando
Hotard, Roland F.,
226 E. Park Ave. Winter Park
Ingram, L. C.,
Box 1711 Orlando
†Johnston, Colonel Geo. C.,
Box 272 Orlando
Lawrence, E. J. Winter Garden
Lawson, Ben H., Winter Garden
Lewis, P. M.,
Box 346 Orlando
McBride, Thomas E. Apopka
McEwan, Duncan T.,
106-110 E. Central Ave. Orlando
McEwan, John S.,
106-110 E. Central Ave. Orlando
Mallory, Meredith,
Box 1011 Orlando
Marshall, C. J. Sanford
Miles, W. G.,
Box 1255 Orlando
Morton, B. Rosalie Slaughter
..... Winter Park
Oertel, H. B.,
32 E. Concord Ave. Orlando
Osineup, Gilbert S.,
300 E. Colonial Drive. Orlando
Page, W. Grady,
State Bank Bldg. Orlando
†Person, W. C.,
258 So. Main St. Orlando
Pines, John Andrew,
106-10 E. Central Ave. Orlando
Redding, John L.,
126 S. Orange St. Orlando
Rivers, Thomas M. Kissimmee
Shoemaker, Samuel A.,
30 E. Church St. Orlando
Sinclair, W. E.,
Clinic Bldg. Orlando
Spiers, Wm. H.,
Box 1712 Orlando
White, Roland T.,
211 S. Rosalind Ave. Orlando

PALM BEACH COUNTY MEDICAL SOCIETY

Fleming, Samuel W., President,
417 Harvey Bldg., West Palm Beach
Johnson, Vesev M., Vice-President,
Good Samaritan Hospital
..... West Palm Beach
Carlisle, J. L., Secretary,
253 Barcelona Rd., West Palm Beach
Hempel, Frederick K., Treasurer,
Box 1057 West Palm Beach
Arnold, Wilbur O.,
Box 1735 West Palm Beach
Baldwin, R. Henry,
1101 Harvey Bldg., West Palm Beach
Binkley, John Frey,
1206 Harvey Bldg., West Palm Beach
Blair, Wm. M.,
424 Comeau Bldg., West Palm Beach
Brantley, Grady H.,
P. O. Box 336 Lake Worth
Clay, B. S.,
1203 Harvey Bldg., West Palm Beach
Cooley, Roy O.,
Box 1735 West Palm Beach
Creel, Chas. E. Pahokee
Dawson, Geo. M.,
P. O. Box 1836 West Palm Beach
Denison, Raymond C.,
521 Lake Ave. Lake Worth
George, Wm. W.,
1116 Harvey Bldg., West Palm Beach
Gill, Richard S.,
1114 Fla. Ave. West Palm Beach
*Gunter, T. D.,
Box 85 West Palm Beach
Heath, Guy W.,
409-11 Harvey Bldg., W. Palm Beach
Lewis, Gaylord,
Harvey Bldg. West Palm Beach
Netto, Lloyd Joseph,
415 Comeau Bldg., West Palm Beach
Nowling, James C.,
309 Harvey Bldg., West Palm Beach
Papot, Grace Elliott,
811 Harvey Bldg., West Palm Beach
*Peek, Leon A.,
119 S. Narcissus St., W. Palm Beach

*Peery, E. W.,
Box 2016 West Palm Beach
Pittman, J. H.,
Box 552 West Palm Beach
Powell, J. A.,
Box 561 West Palm Beach
Rowe, Alva L. Lake Worth
Rozier, Lauchlin M.,
411-414 Comeau Bldg.,
West Palm Beach
Sayad, William Y.,
1215 Harvey Bldg. W. Palm Beach
Shackelford, W. L. West Palm Beach
Sory, B. B., Jr.,
Harvey Bldg. West Palm Beach
Stone, Vale D.,
313 Monroe Drive, West Palm Beach
Van Landingham, Wm. E.,
Citizens Bldg. West Palm Beach
Warren, Hobart E.,
Phipps Plaza Palm Beach
Weems, Nat. M. Boynton
Wilber, A. B. Palm Beach

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

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Harvard, S. C., Vice-Pres. Brooksville
Bradshaw, J. T., Vice-Pres., San Antonio
Creekmore, Geo. R., Sec'y-Treasurer,
112 N. Main St. Brooksville
Anderson, Claude. Dade City
Cannon, Augustus B. Lacoochee
Coogler, A. C. Brooksville
Dame, Geo. A.,
241 Main St. Inverness
Hamblin, A. C. Valrico
Hudson, P. J. Crystal River
Jackson, Thos. F.,
Box 241 Dade City
Jones, W. Wardlaw. Dade City
Mills, David A. Zephyrhills
Moon, William B. Crystal River

PINELLAS COUNTY MEDICAL SOCIETY

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Equitable Bldg. St. Petersburg
Nickie, Millen A., Vice-President,
503-5 Coachman Bldg. Clearwater
Strickland, Jesse A., Vice-President,
712 Power & Light Bldg.,
St. Petersburg
Mills, A. L., Secretary,
814 1st Nat. Bk. Bldg., St. Petersburg
McConnell, Whitman C., Treasurer,
1005 Equitable Bldg., St. Petersburg
†Albaugh, Andrew P. Tarpon Springs
Anderson, J. M.,
333 3rd St. N. St. Petersburg
Anderson, Wm. Douglas,
Box 53 Largo
Bieker, Annette M.,
Power & Lt. Bldg. St. Petersburg
Black, M. Eldridge,
311 Coachman Bldg. Clearwater
Burnette, Elmer W.,
1st Nat. Bk. Bldg., Tarpon Springs
Cooper, J. H.,
1st Nat. Bank Bldg., St. Petersburg
Davis, W. M.,
342 1st Ave. N. St. Petersburg
Dawson, S. A.,
870 7th Ave. N. St. Petersburg
Echard, T. B.,
Fla. Nat. Bk. Bldg., St. Petersburg
Farber, Wm. P.,
807 Power & Light Bldg.,
St. Petersburg
Feaster, Orion O.,
St. Anthony's Hosp., St. Petersburg
Funk, Neil E.,
702 Power & Light Bldg.,
St. Petersburg
Gable, Linwood M.,
203 Power & Light Bldg.,
St. Petersburg
Gable, Nonie W.,
706 Power & Light Bldg.,
St. Petersburg
Gable, Nonie Wilson,
Health Dept., 175 5th St. N.,
St. Petersburg

Green, Thadeus H.,
614 Hall Bldg. St. Petersburg
Griffin, Thos. R.,
Power & Lt. Bldg., St. Petersburg
Groves, W. H. Clearwater
Harden, W. W.,
814 First Nat. Bk. Bldg.,
St. Petersburg
Hardenbergh, John A.,
404 Power & Light Bldg.,
St. Petersburg
Hebard, C. E.,
Fla. Nat. Bk. Bldg., St. Petersburg
Heibner, Eugene A.,
Power & Lt. Bldg., St. Petersburg
Herring, John A.,
350 3rd Ave. N. St. Petersburg
Hooper, C. A.,
Glen Eden Hotel, Glen Arbor, Mich.
Horne, Lester W.,
Power & Lt. Bldg., St. Petersburg
Jennings, Frank S.,
225 3rd St. N. St. Petersburg
Kaufman, Frank E.,
Coachman Bldg. Clearwater
Knowlton, R. H.,
Power & Lt. Bldg., St. Petersburg
Hamblin, L.,
Box 1805 St. Petersburg
Langley, Francis H.,
614 Times Bldg. St. Petersburg
LeBreton, Prescott,
American Legion Hospital,
St. Petersburg
Leith, Richard B.,
201 Snell Bldg. St. Petersburg
Lochner, G. M.,
406 Power & Light Bldg.,
St. Petersburg
Lustig, Emil,
500 7th Ave. N. St. Petersburg
MacCordy, Earl C.,
1335 9th St. N. St. Petersburg
Marr, Norval M.,
812 Power & Light Bldg.,
St. Petersburg
Mease, John A., Jr.,
Virginia Ave. Dunedin
Melville, Edmond John,
335 Third Ave. N. St. Petersburg
Moeller, Maximilian W.,
1077 15th Ave. N. St. Petersburg
Murphy, Ralph D.,
Box 82 St. Petersburg
Nettles, Robbins,
402-5 Coachman Bldg. Clearwater
O'Brien, Raymond K.,
E. 105 5th Ave. N. St. Petersburg
†Osgood, G. E.,
2804 4th St. S. St. Petersburg
†Peabody, J. D.,
456 3rd St. N. St. Petersburg
Post, William G., Jr.,
814-5 Power & Light Bldg.,
St. Petersburg
Prather, B. T.,
701 Fla. Nat. Bk. Bldg.,
St. Petersburg
Putnam, Harry L.,
1027 17th Ave. N. St. Petersburg
Quicksall, J. Braden,
221 Taylor Arcade. St. Petersburg
Quicksall, William E.,
222 Taylor Arcade. St. Petersburg
Roope, A. P.,
Power & Lt. Bldg., St. Petersburg
Roush, Franklin W.,
4689 Lakeview Ave., St. Petersburg
Rudolph, Council C.,
512 Power & Light Bldg.,
St. Petersburg
Simcox, Lawrence,
201 3rd St. N. St. Petersburg
Solomon, H. D.,
Power & Lt. Bldg., St. Petersburg
Stuart, M. H.,
208 Equitable Bldg., St. Petersburg
Timberlake, Gideon,
6th Floor Times Bldg.,
St. Petersburg
Wade, Hugh W.,
512 Power & Light Bldg.,
St. Petersburg
White, Benjamin L.,
202 1st Nat. Bk. Bldg.,
St. Petersburg
Whitford, Grace Ruarc. Ozona
Williams, Carl A.,
Box 975 St. Petersburg
Winchester, Harold E.,
Box 448. Dunedin
Wood, Alvin J.,
801 1st Nat. Bk. Bldg.,
St. Petersburg

*Deceased.

†Honorary Member.

Wright, Claude B.,
Equitable Bldg.....St. Petersburg
Wylie, LeRoy A.,
Suite 210-213 Medical Arts Bldg.,
St. Petersburg

POLK COUNTY MEDICAL SOCIETY

Simpson, W. T., President,
Winter Haven
Cordes, Henry B., Jr., Vice-President,
P. O. Box 84.....Frostproof
Boulware, James, Secretary-Treasurer,
Box 367.....Lakeland
Alexander, Omer R.,
25-26 Beymer Bldg...Winter Haven
Besenbruch, Peter W.,
Orange St.....Davenport
Bird, Paul,
Box 414.....Lakeland
Carefoot, G. H.....Ft. Meade
Clark, Samuel A.,
802 Marble Arcade Bldg..Lakeland
Cline, R. L.,
P. O. Box 462.....Lakeland
Freeman, Grover C.,
P. O. Box 1202.....Lakeland
Fuller, Henry.....Mulberry
Gilbert, R. E.,
19 Postal Arcade....Winter Haven
Gilchrist, J. G.,
Box 744.....Bartow
Griffin, J. D.,
203 Hartzell St.....Lakeland
Gylard, Stephen P.,
814 F. N. B. Bldg.....Tampa
Hargrove, Julian L.,
Polk County Hospital.....Bartow
Harness, A. J.....Lakeland
Horton, Waldo,
539 Ave. B, N.W.,...Winter Haven
Hughes, Robert L.,
225 E. Main St.....Bartow
Hurlburt, C. J.....Bartow
Irons, F. E.....Winter Haven
Koon, Alpheus C.,
513 W. Lemon St.....Lakeland
Lester, John G.,
P. O. Box 548.....Lakeland
Lindsey, Sherrod A.....Fort Meade
*McMurray, E. R.,
655 Wilson Ave.....Bartow
Martin, Emmett E.,
152 7th St.....Haines City
Mooty, Ross H.....Winter Haven
Murphy, C. H.....Bartow
Murphy, H. K.,
Polk & Main Sts.....Mulberry
Overstreet, George C.,
Marble Arcade.....Lakeland
Pennington, B. Y.....Lake Wales
Ragsdale, Velpeau H.,
A. A. C. Co. Hospital.....Pierce
Richards, H. Mercer,
Box 72.....Lakeland
Shafer, W. W.....Haines City
Sherman, William E.,
716 W. Central Ave...Winter Haven
Simmons, Thomas G.,
Corlett Bldg.....Auburndale
Smith, Samuel F.,
Box 628.....Lakeland
Stetson, A. G. C.,
Sullivan Bldg.....Lakeland
Sullivan, Raleigh R.,
1006 Marble Arcade Bldg., Lakeland
Tillis, W. L.,
502 Marble Arcade Bldg..Lakeland
Tinkler, B. R.....Lake Wales
Vaughn, John W.,
Box 1021.....Lakeland
Watson, Herman,
P. O. Box 944.....Lakeland
Weed, Walter A.,
Exchange Bldg.....Orlando
Wilhoite, Roy E.....Lake Wales
Williams, E. L.....Ft. Meade
Wilson, John F., Jr.,
P. O. Box 254.....Lakeland

PUTNAM COUNTY MEDICAL SOCIETY

Warren, Edmund W., Secretary,
Box 88.....Palatka
Drexel, A. E.....Palatka
Strong, S. B.,
Station Hospital, Ft. Oglethorpe, Ga.

ST. JOHNS COUNTY MEDICAL SOCIETY

Walkup, A. Clark, President,
116 St. George St....St. Augustine
Fletcher, E. Gordon, Vice-President,
East Coast Hospital...St. Augustine
Britt, Reddin, Secretary,
Box 1226.....St. Augustine
Grace, Charles C., Treasurer,
East Coast Hospital...St. Augustine
Estes, Edgar S.,
305-9 1st Nat. Bk. Bldg.,
St. Augustine
*Irwin, J. M.....St. Augustine
Lockwood, Vernon A.,
East Coast Hospital...St. Augustine
Potter, George W.,
East Coast Hospital...St. Augustine
Spencer, J. J.....St. Augustine
*Walton, Milton.....Hastings
Webb, Walter D.,
1st Nat. Bk. Bldg....St. Augustine
White, Herbert E.,
401-5 1st Nat. Bk. Bldg.,
St. Augustine

ST. LUCIE-OKEECHOBEE-INDIAN RIVER-MARTIN COUNTY MEDICAL SOCIETY

Davis, Claude L., President., Okeechobee
Whiddon, Lester L., Vice-President,
200-01 Peacock Bldg....Ft. Pierce
Parker, J. D., Sec'y-Treasurer,
Box 942.....Stuart
Boothe, R. C.....Ft. Pierce
Clark, H. D.,
Ft. Pierce Bk. & Tr. Bldg.,
Ft. Pierce
Claxton, W. A.,
State Board of Health..Jacksonville
Council, Melton D.,
Arcade Bldg.....Ft. Pierce
Glidden, C. H.....Ft. Pierce
Hardee, E. B.....Vero Beach
Hardie, Grover C.,
134½ N. 2nd St.....Ft. Pierce
Harrell, G. L.....Vero Beach
Lingo, M. J.....Okeechobee
Newnham, J. A.....Stuart

SARASOTA COUNTY MEDICAL SOCIETY

Cribbins, Orville H., President,
224 Commercial Court.....Sarasota
Taylor, T. W., Vice-President,
Walpole Bldg.....Sarasota
Harris, J. E., Secretary,
224 Commercial Court.....Sarasota
Halton, Jack,
Citizens Bank Bldg.....Tampa
Halton, Joseph,
Pineapple Ave.....Sarasota
Johnston, W. J.,
215 Commercial Court.....Sarasota
Kennedy, David R.,
1st Bk. & Tr. Bldg.....Sarasota
Morton, Arthur O.,
Commercial Court.....Sarasota
Myers, Nicholas P.....Parrish
Patterson, John C.,
Palmer Nat. Bk. Bldg....Sarasota
Wilson, Cullen B.,
1st Bk. & Tr. Bldg.....Sarasota

SEMINOLE COUNTY MEDICAL SOCIETY

Tolar, Julian N., President,
First St.....Sanford
Knox, A. W., Vice-President,
Masonic Temple Bldg....Sanford
Denton, John T., Sec'y-Treasurer,
Meisch Bldg.....Sanford
Langley, W. T.,
Meisch Bldg.....Sanford
Martin, John W.,
Box 95.....Oviedo
Mitchell, Clifford M.....Sanford
Park, Chas. L.,
515-16 1st Nat. Bk. Bldg..Sanford
Puleston, Samuel,
Brumley Puleston Bldg....Sanford
Selman, G. S.,
Lake View Ave.....Sanford

Smith, Henry D.,
Touchton Drug Co. Bldg...Sanford
Stevens, Ralph E.,
Veterans' Administration Hosp.,
St. Petersburg

SUMTER COUNTY MEDICAL SOCIETY

Mitchell, W. E., Secretary,
Box 237.....Coleman
Albritton, Andrew B.....Wildwood
Wood, Samuel C.....Leesburg

TAYLOR COUNTY MEDICAL SOCIETY

Baker, W. L., President.....Foley
Greene, Ralph J., Vice-President, Perry
Weeks, J. L., Secretary.....Perry
Ellis, John C.....Perry
O'Quinn, Charles A.....Perry
Warren, George H.,
Main St.....Perry

VOLUSIA COUNTY MEDICAL SOCIETY

Bouchelle, Louis B., President,
New Smyrna
Howe, Roy, Vice-President,
222 Volusia Ave....Daytona Beach
Rutter, Joseph H., Sec'y-Treasurer,
110 S. Palmetto Ave., Daytona Beach
Brown, L. V. L.....DeLand
Chandler, J. R.,
213 Orange Ave....Daytona Beach
Clemmer, Charles A.,
Box 3236.....Daytona Beach
Davis, George A.,
Dreka Bldg.....DeLand
Davis, Joseph B.,
Halifax Dist. Hosp., Daytona Beach
Dillard, T. H.....DeLand
Doern, William Y.,
Box 5272.....Daytona Beach
Fogarty, Joseph N.....Daytona Beach
Forster, Davis,
701 N. Orange Ave...New Smyrna
Glatzau, L. W.,
300 So. Beach St....Daytona Beach
Green, George M.,
102½ So. Beach....Daytona Beach
Henry, H. W.,
205 State Bk. Bldg...New Smyrna
Howe, Raymond,
Box 1582.....Daytona Beach
Johnson, Harry D.,
Box 1242.....Daytona Beach
Merryday, Harry L.....Daytona Beach
Miller, B. E.,
412 Canal St.....New Smyrna
Miller, Harold E.,
412 Canal St.....New Smyrna
Miller, R. L.,
258½ S. Beach St....Daytona Beach
Myres, M. J.,
Room 3, 258½ S. Beach St.,
Daytona Beach
Pay, W. C.,
221 W. Rich Ave.....DeLand
Rawlings, James E.,
221 Orange Ave....Daytona Beach
Stern, Maximilian,
220 Magnolia Ave...Daytona Beach
Taylor, Joseph E.....DeLand
Wells, J. Ralston,
Woolworth Bldg....Daytona Beach
West, Hugh.....DeLand

WALTON-OKALOOSA COUNTY MEDICAL SOCIETY

Huggins, E. L., President.....Freeport
Stephens, S. E., Vice-Pres., Laurel Hill
Williams, A. G., Sec'y-Treas., Lakewood
McDonald, C. W.....DeFuniak Springs
McSween, J. C.....DeFuniak Springs
Spires, Ralph B.....DeFuniak Springs
Spires, W. G.....Darlington
Webb, Edward P.,
City Pharmacy.....Crestview

INDIVIDUALS

‡Anderson, Thomas S.,
P. O. Box 127.....Live Oak

*Deceased.

‡Honorary Member.

STATE NEWS ITEMS

Dr. Frank D. Gray, who spent two weeks as a patient at the hospital in Savannah, has returned to Orlando minus a troublesome goiter and much improved in health.

* * *

Dr. L. Sydnor Laffitte recently returned from New York where for the past two years he did postgraduate work in internal medicine. For one year he was resident physician on the tuberculosis service at Bellevue Hospital. Dr. Laffitte has opened offices in the Medical Arts Building, Jacksonville.

* * *

Dr. Stephen P. Gyland, formerly of Brewster, has moved to Tampa and opened offices in the First National Bank Building.

* * *

Dr. Duncan McEwan of Orlando has rented a cottage on Lake Holden and has as guests his father and Dr. Oscar P. Schoenemann of Brooklyn, N. Y.

* * *

The Southeastern Surgical Congress will hold its fifth annual assembly in Nashville, Tennessee, March 5, 6 and 7. The Andrew Jackson Hotel will be hotel headquarters and the lectures and exhibits will be in the War Memorial Building.

* * *

Representatives in a very desirable city in Florida of about 1,000 inhabitants desire a capable physician to locate there. This city is located in the southeastern part of the State and the nearest physician at present is about twenty-four miles distant. This little Florida city seems to be a thriving community and nicely situated. Electric lights, churches, high school and other usual conveniences are available and the city is apparently growing. It is situated in the citrus belt and a physician who would locate there could cover quite a large community outside of the city. Any licensed physician in the State who may be interested in locating in this Florida city is requested to address Box 81, Jacksonville.

* * *

Dr. Henry Hanson of Jacksonville, State Health Officer, was an invited guest of the Committee on Survey of Tropical Diseases at a meeting held in Washington, February 5 and 6 for the purpose of forming a permanent Academy of Tropical Medicine for the United States and its possessions.



JOHN ELLIOTT BOYD

Dr. John Elliott Boyd, one of Florida's most outstanding surgeons, died in Jacksonville, January 26. Dr. Boyd had been confined to his bed for about ten days.

Dr. Boyd had been Chief of Staff of St. Vincent's Hospital since 1916 and for twenty-two years he was Chief of Staff of the Duval County Hospital, resigning that position three years ago. Upon his retirement from the hospital staff, the members presented the hospital with an oil portrait of Dr. Boyd which has been hung in its halls and is a prized possession of the institution.

Although he was a widely-known physician, Dr. Boyd had an inclination toward military life and during the Spanish-American War was captain of the Darlington (S. C.) Guards. He also served in France during the World War.

Dr. Boyd was born December 11, 1869, at Darlington, S. C. His father, Col. Robert Watson Boyd, was a native of South Carolina and one of the most prominent lawyers in that State. His mother, Mary Louise McCall, also was a native of South Carolina, the daughter of George C. McCall, a wealthy planter.

Dr. Boyd was reared at Darlington and received his literary education at the University of South Carolina at Columbia. After leaving college he was a drug clerk for a year, working in preparation for the study of medicine.

He entered the medical college of the University of South Carolina in 1891, graduating in 1894 with first honors in his class and winning the collegiate prize, a silver loving cup.

After graduation, Dr. Boyd returned to Darlington and practiced his profession there until the outbreak of the Spanish-American War in 1898.

Dr. Boyd, who had been attracted to military life, was at that time first lieutenant of the Darlington Guards, an old company which served with honors during the War Between the States. The company was at once prepared for active service and Dr. Boyd promoted to the rank of captain in command of it.

The Darlington Guards were mustered in as Company A, independent battalion, South Carolina Volunteers. Dr. Boyd was tendered the position of surgeon of the battalion, but he declined the offer, preferring to remain in the fighting line. The company later was placed in the first battalion, Second South Carolina regiment, and Dr. Boyd commanded it all through the war, spending three months in Cuba with the Seventh Army Corps under the command of Gen. Fitz-Hugh Lee. He was distinguished throughout by his bravery and faithful execution of duty.

Dr. Boyd came to Jacksonville at the close of the war in 1899 and again resumed his practice of medicine. In the winter of 1896-97 he had taken a post-graduate course at the New York Polyclinic.

With the entry of the United States into the World War, Dr. Boyd re-entered the military service as a lieutenant-colonel in the Thirteenth Field Artillery medical corps, Fourth Division, regulars. He served in France during the war and after the Armistice was stationed in Germany with the Army of Occupation.

Dr. Boyd was a past president of the Duval County Medical Society. He also held membership in the Florida Medical Association and the American Medical Association. He had a fellowship in the American College of Surgeons. During the administration of the late Gov. W. S. Jennings, he served on the governor's staff.

Dr. Boyd is survived by his widow, Mrs. Hazel L. Boyd; a daughter, Miss Anna Locke Boyd,

student at Duke University; a son, Robert Watson Boyd, pupil at Lee High School, and three nephews, Dr. Robert Boyd McIver, with whom he shared offices in the St. James Building; John K. McIver, Jacksonville, and George Elliott McIver of Savannah, Ga.

In the passing of Dr. Boyd the medical profession of Jacksonville and Florida lost one of its most beloved members.

CLYDE CLEMENT BOHANNON

Dr. Clyde C. Bohannon, aged 58, a resident of Daytona Beach for thirty years, and dean of Daytona's physicians and surgeons, died at his home, January 29, after a year's illness of myocarditis.

Dr. Bohannon was born in Lynville, Ind., and after a public school and academic college education graduated from St. Louis Medical College in 1902. After a year's practice in Indiana he came to Daytona Beach in 1904 and six years later established a private hospital there which he maintained until the opening of the Halifax Hospital in 1928, when he became chief of its surgical staff, a position he held for two years. He had taken post-graduate courses at Mayo's Clinic in Minnesota, and at Chicago and New York.

He had served as president, secretary and treasurer of the Volusia County Medical Society.

Surviving him here are his widow, Mrs. Elizabeth Mae Heideloff Bohannon and two children, Elizabeth Mae and Clyde Clement Bohannon, Jr. Two sons by an earlier marriage live in California.

LEON ASHLEY PEEK

Dr. Leon Ashley Peek, 59, one of West Palm Beach's leading surgeons, was born in Laurville, Florida, 1875, and died at West Palm Beach, Florida, January 5, 1934, of cardio-renal disease. Dr. Peek received his medical education from the University of Maryland and the University of the State of New York. After graduation he moved to Melbourne, Florida, later moving to West Palm Beach in 1910, where he practiced his profession until the time of his death.

Dr. Peek was a member of the Staff of the Good Samaritan Hospital. He was instrumental in bringing about the construction of this institution in 1919. Dr. Peek was also a member of the

Palm Beach County Medical Society, Florida Medical Association, American Medical Association and a Fellow in the American College of Surgeons, a member of the Rotary Club, a Mason, a Shriner and a member of the Knights of Pythias and Elks.

He is survived by his widow, Mrs. Jennie Cecilia Peek, and two children, Cecil M. Peek and Anita Peek.

The following resolution was passed by the Palm Beach County Medical Society at the regular meeting held January 22, 1934:

"Whereas, God in His infinite wisdom hath seen fit to remove from our midst one of our most beloved brothers, Dr. Leon Ashley Peek, and

"Whereas, by his untiring devotion to the practice of medicine and surgery and his continued sacrifices in the interest of charity, he endeared himself to the entire community, and

"Whereas, we, the members of the Palm Beach County Medical Society, feel deeply the loss of our esteemed brother and friend; therefore be it

"RESOLVED, That the Palm Beach County Medical Society expressed its sorrow in the passing of Dr. Leon Ashley Peek; that a copy of this resolution be sent to his wife; that a copy be entered on the minutes of this Society; and that the same be published in the Journal of the Florida Medical Association and in the local press."

Dr. Walter A. Weed, formerly of Lakeland, has moved to Orlando where he has opened offices on the second floor of the Exchange Building.

* * *

Dr. Walter C. Jones of Miami has been given a place on the program of the Southeastern Surgical Congress at its fifth annual assembly to be held in Nashville early in March.

* * *

Dr. Hugh West of DeLand has returned from a two weeks' visit at the Mayo Clinic.

* * *

The following officers were elected at the annual meeting of the Duval County Hospital Staff:

President—Shaler Richardson.

Vice-President—W. M. Shaw.

Secretary—Louie Limbaugh.

COMPONENT COUNTY SOCIETIES

ALACHUA COUNTY MEDICAL SOCIETY

The following officers have been elected by the Alachua County Medical Society to serve for the ensuing year:

President—J. L. Summerlin, Gainesville.

First Vice-President—C. D. Whitaker, Raiford.

Second Vice-President—J. M. Willis, Williston.

Sec'y-Treas.—Harry M. Merchant, Gainesville.

Delegates to State Meeting—George C. Tillman, Edwin H. Andrews.

Alternates—John E. Maines, Jr., DeWitt T. Smith.

BREVARD COUNTY MEDICAL SOCIETY

The following officers have been elected by the Brevard County Medical Society to serve for 1934:

President—Thomas C. Kenaston, Cocoa.

Vice-President—J. D. Chunn, St. Cloud.

Sec'y-Treas.—I. K. Hicks, Melbourne.

BROWARD COUNTY MEDICAL SOCIETY

The following officers have been elected by the Broward County Medical Society to serve for 1934:

President—Bruce F. Butler, Hollywood.

Vice-Pres.—Anna A. Darrow, Ft. Lauderdale.

Sec'y-Treas.—O. C. Brown, Ft. Lauderdale.

Delegate to State Meeting—E. M. Hendricks, Ft. Lauderdale.

Alternate—Leigh F. Robinson, Ft. Lauderdale.

COLUMBIA COUNTY MEDICAL SOCIETY

At the annual meeting of the Columbia County Medical Society the officers who served for 1933 were reelected for 1934. They are as follows:

President—L. M. Anderson, Lake City.

Vice-President—R. B. Harkness, Lake City.

Sec'y-Treas.—T. H. Bates, Lake City.

DADE COUNTY MEDICAL SOCIETY

At the meeting of the Dade County Medical Society held February 2, Dr. James O. Wallace of Pittsburg, Pa., was guest of honor and principal speaker. His subject was "Derangements of the Knee Joint." Dr. Max Dobrin read a paper on "Diabetes Mellitus in Relation to the Pituitary Gland."

At the January 5 meeting of the Society, the following program was presented:

"Therapy by Regional Block Anesthesia and Injections"—G. Labat.

"A Plea for a More Kindly Attitude Toward Permanent Colostomy"—Joseph S. Stewart, Jr., Miami.

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The regular monthly meeting of the De Soto-Hardee-Highlands County Medical Society was held in Bowling Green Tuesday, January 9, 1934, with the following members present: Doctors Pyatt, Kayton, Poucher, Simmons, Spears, Peacock, Kirkpatrick, McKnight, Chandler, Weems, Bevis, Highsmith, Martin. Visitors: Doctors Boulware, Tillis, Brewster, Alexander, Faison, Philpot, McSwain.

After reading the minutes which were adopted, Dr. Boulware of Lakeland read a very interesting paper on "The Use of Phenobarbital in Infancy," which was discussed by Dr. Kirkpatrick and Dr. Simmons. Dr. Kirkpatrick made a motion that the secretary try to get Dr. Richardson of New York for our next meeting in Sebring. Motion was carried.

Under case reports, Dr. Bevis asked for a discussion on the treatment of malaria. This brought forth a number of suggestions regarding the treatment of this disease, especially the use of atabrine.

Dr. M. T. Alexander's transfer from Kanawka County Medical Society, West Virginia, was read and he was welcomed into the Society. The application of Dr. Guy O. Brewster of Sebring was read and referred to Board of Censors.

The meeting adjourned to meet in Avon Park in February.

DUVAL COUNTY MEDICAL SOCIETY

At the regular meeting of the Duval County Medical Society, held February 6, the following symposium on "Indigestion or Dyspepsia" was presented:

Indigestion, the Significance of this Commonly Occurring Complaint—Ernest B. Milam.

Function of the Laboratory in Diagnosis of Gastro-Intestinal Conditions—C. E. Royce.

The Attitude of the Surgeon Toward Indigestion—Harry Peyton.

The Attitude from the Medical Standpoint—Herrman H. Harris.

What the X-ray Can Do in the Evaluation of Gastro-Intestinal Symptoms—H. B. McEuen.

The membership of the Duval County Medical Society has been divided up into a number of committees to handle the various activities at the next convention. Many plans for the entertainment of the Association are already well under way. Duval County Medical Society will do its utmost to put over a splendid convention.

HILLSBORO COUNTY MEDICAL SOCIETY

At the annual meeting of the Hillsboro County Medical Society, the following officers were elected for the ensuing year:

President—E. S. Gilmer.

Vice-President—G. C. Bottari.

Sec'y-Treas.—John S. Helms, Jr.

LEE COUNTY MEDICAL SOCIETY

THE LEE COUNTY MEDICAL SOCIETY HAS THE DISTINCTION OF BEING THE FIRST SOCIETY TO REPORT 100% OF DUES PAID FOR THE YEAR 1934. CONGRATULATIONS, LEE COUNTY MEDICAL SOCIETY!

MARION COUNTY MEDICAL SOCIETY

The following officers have been elected by the Marion County Medical Society to serve for the ensuing year:

President—J. L. Chalker, Ocala.

Vice-President—A. G. Brown, Dunnellon.

Sec'y-Treas.—R. C. Cumming, Ocala.

Delegates to State Meeting—R. E. Russell, Ocala, and E. G. Peek, Ocala.

ORANGE COUNTY MEDICAL SOCIETY

At the election of officers held by the Orange County Medical Society recently, the following were chosen to serve for 1934:

President—J. R. Chappell, Orlando.

Vice-President—T. M. Rivers, Kissimmee.

Secretary—J. A. Pines, Orlando.

Treasurer—H. A. Day, Orlando.

The 26th annual banquet of the Orange County Medical Society was held at Sharkey's restaurant at 8 o'clock Wednesday evening, January 17. Out of a membership of 49, thirty-two were present to enjoy the social occasion.

Dr. J. R. Chappell, president of the society, presided with Colonel Geo. Johnston, honorary member, acting as toastmaster.

The Society had the honor of entertaining some very distinguished guests among whom were Asst. Surgeon Gen. C. W. Stiles of the U. S. Public Health Service of Washington, D. C.; Dr. W. A. Claxton of Jacksonville; Dr. S. N. Palmer of Baltimore, Md.; Dr. O. P. Sherman of New York; Dr. L. H. Wright of Atlanta, and Dr. Walter Weed, who has recently located in Orlando.

Four members are seriously ill: Dr. Frank Gray, Dr. C. J. Marshall, Dr. W. C. Person, and Dr. P. M. Lewis. They all sent messages of regret, but their presence at the festive board was greatly missed.

The secretary was asked to write letters to these members extending the good wishes of the society for their speedy recovery and regrets that they could not be present on this occasion.

Col. Johnston spoke briefly on the necessity of cooperation and brotherly love among the members of the medical society and offered the following resolution as the society's 1934 standard:

"Resolved: As a member of this medical society I will offer no criticism or make any disparaging remarks about my fellow practitioners, and will do all in my power to promote and maintain a feeling of harmony and cooperation in our society."

This resolution was unanimously adopted by a rising vote.

Dr. Stiles responded to a toast from Col. Johnston and spoke briefly on the advantages of Orange County as an ideal location for patients suffering from bronchial trouble. He also complimented the city's milk supply as much superior to that of many other places.

Several other members responded to toasts in bursts of oratory seldom heard except at these annual occasions.

Mr. Sharkey served a delicious banquet dinner which was enjoyed by all. Adjournment was at a late hour, the members forgetting to sing the society's closing song, "Sweet Adeline."

PALM BEACH COUNTY MEDICAL SOCIETY

The Palm Beach County Medical Society, at its regular meeting held January 5, 1934, passed a resolution demanding a minimum fee of \$5.00 from insurance companies for all insurance examinations, inspections and certificates of health, etc. A copy of this resolution will be forwarded to the home office of all companies doing business in the State of Florida.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

The annual banquet of the Pasco-Hernando-Citrus County Medical Society was held at the Tangerine Hotel, Thursday evening, January 11, 1934. At this time the doctors' wives were invited guests.

A full course turkey dinner was served by Mrs. Melton, of the Tangerine Hotel. Bouquets were furnished the men and bouquets and other favors were given the ladies.

After the banquet was served, the ladies were entertained at the Dixie Theatre by the Medical Society, and the doctors held their regular program in the parlor of hotel, Dr. Leland H. Dame acting as toastmaster.

Dr. L. H. Dame made a few remarks as retiring president. He also spoke of his duties as District Health Officer of the State Board of Health. He then introduced Dr. P. J. Hudson, society president for 1934. Dr. Hudson made a few remarks. He said he appreciated the honor of being president and would do his best to serve the society during the year. Dr. Hudson called on all doctors present for a speech and each responded with remarks of the past year's accomplishments and promised his support in the future.

Those present at the meeting were: Dr. and Mrs. Claude Anderson, Dr. and Mrs. J. T. Bradshaw, Dr. and Mrs. A. B. Cannon, Dr. and Mrs. G. R. Creekmore, Dr. and Mrs. S. C. Harvard, Dr. and Mrs. W. H. Cox, Dr. and Mrs. W. W. Jones, Dr. George Dame, Dr. L. H. Dame, Dr. P. J. Hudson.

PINELLAS COUNTY MEDICAL SOCIETY

The February meeting of the Pinellas County Medical Society was held Friday, February 2, at 6:30 p. m. at Tarpon Springs.

ST. JOHNS COUNTY MEDICAL SOCIETY

At the December meeting of the St. Johns County Medical Society, the election of officers was held with the following result:

President—V. A. Lockwood.

Vice-President—G. Walter Potter.

Secretary—Reddin Britt.

Treasurer—Charles Grace.

Delegate to State Meeting—G. Walter Potter; alternate, H. E. White.

Dr. F. W. Chappel of Hastings was accepted as a member of the society.

Monthly meetings of the St. Johns County Medical Society are held the third Tuesday night of each month, usually at 8:30 p. m.

SARASOTA COUNTY MEDICAL SOCIETY

The election of officers of the Sarasota County Medical Society, held recently, resulted as follows:

President—J. C. Patterson, Sarasota.

Vice-President—A. O. Morton, Sarasota.

Sec'y-Treas.—J. E. Harris, Sarasota.

Delegates to State Meeting—T. W. Taylor, C. B. Wilson.

Alternates—David R. Kennedy, A. O. Morton.

SUMTER COUNTY MEDICAL SOCIETY

The following officers of the Sumter County Medical Society are serving for 1934:

President—A. B. Albritton, Wildwood.

Sec'y-Treas.—W. E. Mitchell, Coleman.

Dr. S. C. Wood of Leesburg will represent the Society as delegate at the next annual meeting of the State Association.

TAYLOR COUNTY MEDICAL SOCIETY

The following officers for 1934 have been elected by the Taylor County Medical Society:

President—W. J. Baker, Foley.

Sec'y-Treas.—C. A. O'Quinn, Perry.

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, Inc.

State Editor

Mrs. S. E. DRISKELL

1410 Windsor Place

Jacksonville, Florida.

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DUVAL AUXILIARY

The Woman's Auxiliary to the Duval County Medical Society held its quarterly meeting at the home of Mrs. Horace R. Drew in Springfield on January 11th with Mrs. Gordon Ira, newly elected president of the auxiliary, presiding.

Mrs. Neil Alford led the opening prayer. Reports were heard, and Mrs. Ira announced that Mrs. Frederick J. Waas had been appointed social committee chairman to plan for entertainment features during the state meeting here in May. Plans for future activities were discussed, and chairmen of standing committees appointed were: Mrs. A. K. Wilson, program; Mrs. S. M. Copeland, publicity; Mrs. George E. Beckman, philanthropic; Mrs. A. H. Wilkinson, hygeia, and Mrs. Waas, social.

Announcement was made that Mrs. Herrman H. Harris, regional hygeia chairman for the Southern division, has received national recognition for outstanding work. The next meeting will be with Mrs. Theodore G. Croft as hostess.

During the social hour the hostess served a salad course. Present at this meeting were about 30 members of the auxiliary.

* * *

PINELLAS AUXILIARY

Mrs. Martha Stetson, superior of school nurses in Pinellas County, was the guest speaker at the regular luncheon meeting of the Pinellas Medical Auxiliary held at the Pennsylvania hotel on January 9.

Mrs. Stetson's talk was on the urgent need for a county health unit. She told of the work now being done by the three school nurses, which includes examinations for physical defects and tests for various diseases, but emphasized the

THE NEXT MEETING
OF THE
FLORIDA MEDICAL
ASSOCIATION
WILL BE HELD AT
JACKSONVILLE

APRIL 30, MAY 1 AND 2, 1934

great need for a county unit, having a directing head under whose leadership could be worked out a generalized program effecting both the home and the school.

Elmer Fay delighted the group with a couple of splendid violin solos.

Mrs. John Herring, president, presided at the business session, which was attended by about twenty-five members.

Mrs. Glenn Post told of arranging through the local Red Cross for a series of health talks to be given by St. Petersburg physicians at a local theater, and of the plans for a nurse to instruct classes in home hygiene and care of the sick. These classes are to be open to all and are to be held at the vocational school.

Mrs. A. L. Mills is to serve on the "Camp Activities" committee of the Girl Scouts and will supervise the arrangements of first aid kits as well as stress posture and other health activities.

* * *

A letter from Mrs. James Blake, national president, says in part: "The 'program of health education' work under Mrs. McGlothlan is the basis of all our auxiliary activities, and wise is the auxiliary president who will follow the slogan, 'Undertake less, accomplish more,' for the character of an auxiliary depends on its working program, and the program depends upon the characters of those who build it; how sincere of purpose they are; how well they understand the needs of their auxiliary and of the community it serves, and how able they are to meet those needs.

"Every auxiliary represents a cross section of community life. Through its membership it contacts other groups that perhaps direct the activities of that cross section. It may be a home group, a church group, a social group, or even a political group. To each of these groups our doctors' wives are contributing largely from the experiences that have come to them as community leaders, and if their program work in the auxiliary has been in good hands they have a wide range of material to offer.

"Every state and county in our nation is facing problems right now. Please, as auxiliary members, study *your* side of every question before you move on with the masses. When the dredging crew arrives let us not be the ones who have rocked the boat. The auxiliary woman of the future must be a woman strong in every sense of the word, not only physically and mentally, but morally and spiritually as well."



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ADVERTISERS' NOTES

EPHEDRINE IN SINUSITIS

The routine use of ephedrine in upper respiratory infection probably influences the course of the disease and may serve to prevent the development of chronic sinusitis. Persistent use of ephedrine in chronic sinus infection probably reduces the necessity for more radical therapeutic measures.

Bacterial invasion from repeated head colds and anatomic faults or defects that interfere with drainage are the commonest factors in the development of chronic sinusitis. Ephedrine applied locally in the nasal passages shrinks the mucous membrane, stimulates ciliary action. This tends to reduce congestion, improve ventilation, and promote drainage. The action of true ephedrine apparently provides the basic principles of sinus treatment. Its effects are prompt, sustained. Inhalant Ephedrine Compound, Lilly (No. 20), with one per cent ephedrine alkaloid combined with menthol, camphor, and oil of thyme in a neutral paraffin oil, is reported to enjoy much favor among medical men. Inhalant Ephedrine (Plain), (No. 21), is preferred by some physicians. It lacks the aromatic properties of the compound.

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(Continued on page 372)



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Refined Pneumonia Serum approximates 10,000 Felton Units per 10 cc. and in addition all the specific antibodies and antitoxic or protective substances contained in the whole serum.

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MERCK INSTITUTE ANNOUNCEMENT

The Merck Institute of Therapeutic Research, Rahway, New Jersey, announces the appointment of Dr. Eugene Maier as Chief Bacteriologist.

Dr. Maier is a graduate of the University of Tuebingen, Wuerttemberg, Germany and completed his studies at the University of Erlangen, Germany.

Dr. Maier was associated with the Rockefeller Institute of New York as Research Assistant from 1926 to 1930. Since 1931, up to the time of becoming associated with Merck & Co., Inc., Dr. Maier has been at Bellevue Hospital, New York, in the department of pathology, as bacteriologist for the Tuberculosis Division of Columbia University.

GAS-GANGRENE ANTITOXIN

For Therapeutic Use

Gas-gangrene infection is a highly fatal disease that may develop following the entrance of the anaerobic spore forming bacteria into wounds, compound fractures, ulcers or severe contusions. Gas-gangrene is frequent in appendicitis, peritonitis and intestinal obstruction because of the invasion of the inflamed tissues by the anaerobic bacteria encountered in the intestinal tract.

National Gas-Gangrene Antitoxin, for treatment of gas-gangrene infection, contains 10,000 units each of Perfringens (*B. welchii*) and Vibrio Septique Antitoxins. In about 95 per cent of patients, infected with Gas-gangrene, the infection is caused by the perfringens and vibrio septique organisms. About 5 per cent of gas-gangrene infections are due to the sordellii, *B. oedematiens* and histolyticus organisms. It is therefore advisable to select a Gas-Gangrene Antitoxin containing a large amount of antitoxin for the two primal organisms chiefly responsible for gas-gangrene infection.

Gas-Gangrene Antitoxin should be employed as soon as symptoms of gangrene develop, and full and repeated doses administered intravenously and if possible subcutaneous doses given at site of injury. Surgical removal of foreign material and of devitalized tissues is essential. Local drainage must be provided, as well as supporting and eliminating treatment, to overcome the grave toxemia.

(Continued on page 374)

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From the diary of the original Samuel Pepys:

Feb. 21, 1665. And then my wife being busy in going with her woman to a hot-house to bathe herself, after her long being within doors in the dirt, so that she now pretends to a resolution of being hereafter very clean. How long it will hold I can guess.

An apology for Mrs. Samuel Pepys

MRS. PEPYS did not take many baths—but no one did in the 17th Century.

Cold houses, lack of even tub-and-sponge facilities, made bathing an ordeal. The desirability of cleanliness was recognized, as Pepys' comment indicates—but the *practice* of cleanliness did not begin until bathing was made *pleasanter*.

Parke-Davis has applied much the same reasoning to vitamin therapy—*i. e.*, by making vitamin therapy pleasanter, its field can be substantially broadened. And to make it pleasanter, you have Parke-Davis Haliver Oil products.

It is a well-known fact that adults are more squeamish than children about taking cod-liver oil, and preparations containing it. Their aversion to fish oil is completely obviated by the high potency of Haliver Oil. All the adult patient has to do is to take one or two tiny, tasteless capsules, instead of those distasteful teaspoonfuls.

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Wounds of all kinds, especially compound fractures, may become infected with the anaerobic spore forming bacteria through the entrance of contaminated soil, or soiled objects, therefore prophylaxis requires the use of combined Tetanus, Perfringens and Vibrion Septique Antitoxins.

Tetanus-Perfringens Antitoxin should be injected subcutaneously, at least part of the dose being injected near the edges of the wound if possible. In extensive or slowly healing wounds a second, or even a third, dose of the serum should be given. It is important that all foreign material and devitalized tissue be removed from the wound.

A great advance in Tetanus-Perfringens Antitoxin for immunization is now effective. National Tetanus-Perfringens Antitoxin contains, in addition to 1500 units of Tetanus Antitoxin, 2000 units each of Perfringens and Vibrion Septique Antitoxins, or double the amount of the perfringens and vibrion septique antitoxins formerly furnished.

The National Drug Company of Philadelphia will mail, on request of physicians, literature on gas-gangrene infections.

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COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon?	
Alachua	Harry M. Merchant, M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	
Bay	Allen H. Miller, M.D., Millville.					
Brevard	I. K. Hicks, M.D., Melbourne.	3rd Tuesday		Varies		
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.		8:00 P.M.	Varies	Yes.	
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	5¢
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	
Hillsboro	John S. Helms, Jr., M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	67¢
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	100¢
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	58¢
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	A. Q. English, M.D., Manatee.	1st and 3rd Tuesdays, Oct. to May; 2nd Tues., May to Oct.	7:00 P.M.	Dixie Grande Hotel Bradenton	Yes.	
Marion	Richard C. Cumming, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	73¢
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	
Orange	John A. Pines, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	
Palm Beach	R. Henry Baldwin, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	33¢
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	
Pinellas	O. O. Feaster, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	58¢
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	
St. Lucie-Okeecho- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	
Seminole	J. T. Denton, M.D., Sanford.	2nd Monday	7:00 P.M.	City Hospital Sanford		
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	
Taylor	C. A. O'Quinn, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	

NOTE—Secretaries: Please submit information to complete the above schedule.



Babies and Growing Children

require an abundance of
VITAMINE-B
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DR. B. RAYMOND HOOBLER (*Jr. A. M. A.*, Aug. 4, 1928), "I believe that every infant should have an addition of Vitamin-B to its formula and should not depend on milk, either human or cow's, as its only source of this vitamin. Just as regularly as orange juice and cod liver oil are prescribed, one should also prescribe a substance rich in vitamin-B for the infant dietary."

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DR. GEO. R. COWGILL (*Jr. A. M. A.*, June 25, 1932), "Insufficient intake of antineuritic vitamin is probably more serious in children than in adults on account of the child's lower capacity for tissue storage of vitamin reserve and a relatively greater need for this factor to meet the requirements of growth as well as of maintenance. It is especially important to realize that vitamin B is a dietary essential, and therefore care should be taken to see that more than enough of this factor is being supplied at all times both to the growing child and to the adult."

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VOLUME XX
NO. 9

Jacksonville, Florida, March, 1934

Yearly Subscription, \$3.00
Single Copy, 30c

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3. Importance of Fresh Livers and Immediate Preparation of Cod Liver Oil for Medicinal Purposes*

*J. C. Drummond and T. P. Hilditch: The Relative Values of Cod Liver Oils from Various Sources, His Majesty's Stationery Office, London, 1930.

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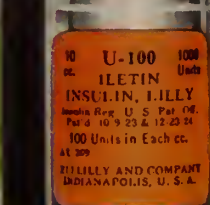
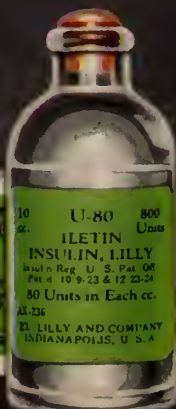
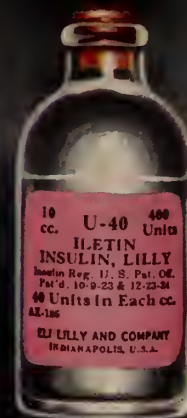
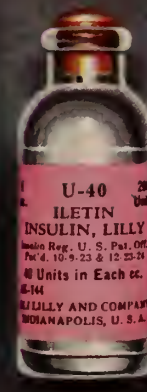
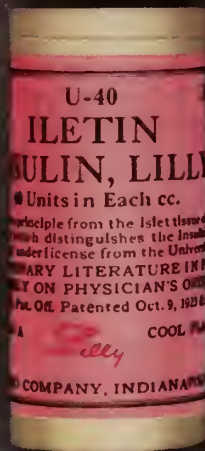
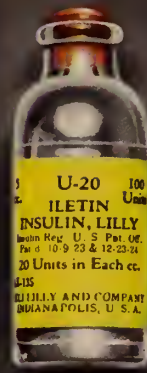
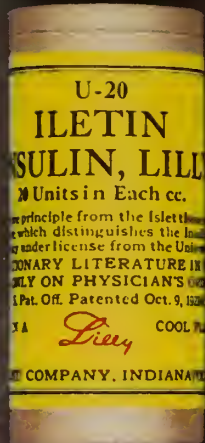
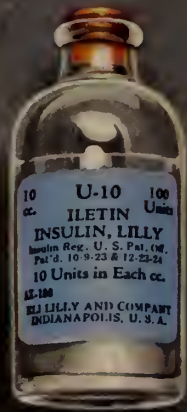
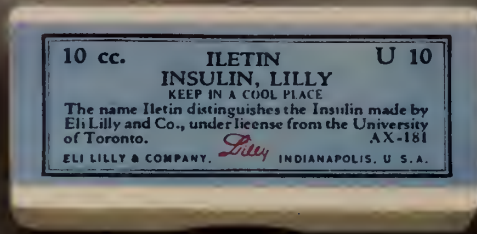
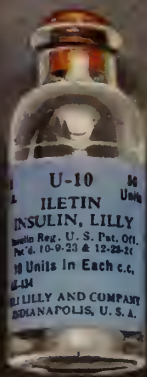
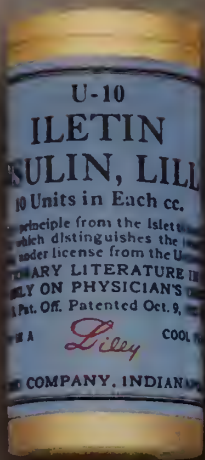
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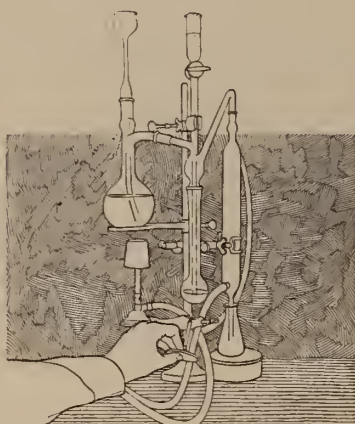
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, March, 1934

Number 9

SOME PROBLEMS OF MEDICINE*

HENRY C. DOZIER, M.D.,
Ocala.

It has seemed to me that there is no more opportune subject for us to consider than some of the many economic and social problems that are confronting the medical profession at this time, not so much from the standpoint of registering a complaint against what some seem to think is the approach of a system of state medicine, but rather that we might be able to recognize the existence of these problems, have a thorough knowledge of them and, as a profession, be able to pass intelligently upon some constructive proposals for their solution.

If we are to solve any of our numerous problems, I believe it is necessary that every individual member of the medical profession, of its associated sciences, and of every organization of the professions involved, be fully cognizant of his responsibilities and lend every effort of mind and influence towards their study and solution. It cannot be done by any one of us alone. No one ever won a profit playing solitaire.

First, there is the problem of the cost of medical care, and, in addition, some of the remedies offered are also problems. These have been discussed in detail by the A. M. A. and other medical bodies, but mostly to register a kick directed principally at some of the solutions offered to bring the cost of medical care within the reach of the average citizen.

An editorial in the January number of the *Southern Surgeon* states: "If various governmental agencies, certain public health officials, insurance companies, or meddlesome laymen will refrain from interfering with the private practice of medicine, all will be well, and there will be no need for expensive committees to make more expensive investigations in the cost of medical care." The *Journal of A. M. A.* says: "The profession need not be greatly annoyed, shocked, disturbed, excited or angered by this pronouncement," referring to the recent "Committee Report." Personally, I do not believe we can dismiss this serious problem by a wave of the hand,

or by disregarding its importance as showing an inevitable tendency of our times.

Second, the matter of Veterans' Relief, particularly as it refers to the treatment of non-service connected disabilities, is still another problem, not only of the medical profession, but it will soon become an economic problem to every citizen of our republic. This also is a part of the same tendency. Happily, this is now, at least temporarily, eliminated by the president's emergency ruling.

Third, transient and local charity is a problem pressing for solution by every hospital staff and board of directors, as are the relations of the profession to the various public health agencies of the state.

Obviously, it is not possible for me to discuss all of these problems. Let us consider a few of the aspects of the new, and now popular phrase, "The Cost of Medical Care." What does it mean to the average layman when he discusses or considers "Costs." Usually his criticisms of medical service are—first, that it costs too much; second, increasing specialization adds to the cost; third, adequate medical facilities are not generally available; fourth, too little emphasis is placed on preventive measures. Are his criticisms well founded and just?

According to an article recently published in *Harper's Magazine*, by Dr. D. L. Duffus: "The nation's medical bill amounts roughly to 3½% to 4% of the total national income, which is about \$25.00 for the average individual, and about \$100.00 a year for the average family. It is about what he annually pays for passenger automobiles, or for gasoline, or for illicit beverages." If this cost were equally distributed to every individual, it would not be a hardship, and would not be complained of as high, when paid for such a precious commodity as health. It is distributed, however, with cruel unevenness. Dr. Duffus also quotes answers to a questionnaire, which he had sent out to various families, which show sums spent for medical care ranging from \$5.00 to \$2,000.00 annually. This certainly shows a wide variation in costs. Among its policyholders, a large life insurance company in New York recently found that the average fam-

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

ily of five, in the income group of \$2,500.00 annually or less, paid about \$69.00 per year for medical costs; and the average family of five in the income group of \$10,000.00 or more, paid for the same costs \$169.00 per year. Now these figures show that there is something wrong with the ideal distribution of medical bills. Either the families in the lower income group are not receiving the full benefits of medical science, or else the families in the higher income group are receiving more of these benefits, or are demanding more (often unnecessary frills probably), or are paying more for the same services.

I shall not attempt to answer the questions suggested by the above statistics except by the comment that they apparently do suggest an unsolved problem. On the other hand, I might suggest that the cost of medical care, especially in hospitals, is often confused with the costs of luxuries, which have little or nothing to do with actual medical care. Private rooms, private baths, private nurses, are often unnecessary, and are occasionally wasteful of badly needed funds. Conversely, it is, of course, true that often the doctor, the surgeon, and other specialists, the laboratory and x-ray technician, the trained nurse, and the hospital are priceless necessities of life.

These costs are not our only problem, but the education of the laymen, and lay press is one of our problems. The layman cannot know what legitimate fees should be, but they no doubt seem very high when he pays his physician, or surgeon, or hospital bills. He does not know, perhaps, that out of every dollar that is collected, the doctor pays 40 cents for professional expenses, equipment, etc., or that no hospital could possibly pay expenses out of monies received from patients, even though they do seem very high. One of our responsibilities as a profession is to awake so that through our leadership public opinion may not only be formed but well informed. I believe there is one absolute law that has not and cannot be repealed and that is that "God helps those who help themselves." This law applies to our profession especially as it refers to the education of the laymen, the lay press, and public opinion.

The recommendation, in the majority report, of the Committee on Costs of Medical Care that "the costs of medical care be placed on a group-payment basis, through the use of insurance, taxation or both" is a problem, and is a matter that I wish to discuss briefly.

There are now twenty-four countries having compulsory health insurance, including Germany, Great Britain, France, Italy, Belgium, Russia; and eighteen others have a voluntary health insurance.

It is quite evident to anyone who studies the history of this compulsory health insurance movement, as a solution of the costs of medical care, that its extension is advancing with accelerating speed. The movement was slow from 1883, when Germany installed her system, until the close of the Nineteenth Century. During this present century, and especially since the close of the World War, its growth has been extremely rapid. Is such a system possible, probable, or desirable in this country?

It is certainly possible; and it is certainly probable, since the conditions precedent to health insurance are industrialization; a large class with incomes too small to provide against the expenses of medical care; a sense of social responsibility; and a realization of the fact that disease in individuals has wide social results. A majority of the nations of the world have sought a solution of such problems, and conditions in so-called "health insurance." The report of the Committee for the Study of Dental Practice of the American Dental Association, states: "There is not a single competent student of the subject, who does not agree that several millions of the population of this country receive incomes insufficient to purchase the fundamental necessities of life. This conclusion is endorsed by employers' organizations and trade unions, by the U. S. Bureau of Labor, charity workers, economists, statisticians, and sociologists of every type and attitude. It is one of the very few undisputed facts in the realm of economics, yet its explicit or implied denial is constantly found in writings admitted to medical journals. Such denials cause much the same sort of reactions among those who are familiar with economic facts, as would arise among physicians if they heard economists or sociologists deny the circulation of the blood."

The really important points for this discussion are, first, that a large section of the population is not able to meet the emergencies caused by disease; second, the majority of the nations of the world have used compulsory health insurance as a solution of this problem; third, the majority report of the Committee on Costs of Medical Care has recommended insurance for America;

fourth, social workers are concerned with the combined problem of health and poverty, and social insurance has been hailed by them as meeting all the phases of this problem. They have given much attention and praise to the sickness insurance systems of Europe; fifth, the American Association for Labor Legislation is committed to the advocacy of social insurance, and has proposed a standard Sickness Insurance Act, which, while avoiding some of the evils, includes many of the defects of such systems.

Shall the medical profession of our state and country make the mistake of our profession in other countries by adopting merely a negative attitude? Shall it oppose what is apparently inevitable in some form or other? Or shall the medical profession grasp the opportunity for leadership in the social relationships of medical care?

The social workers have the ear of the public, and are able to arouse sympathy for their cause, their aims, and methods, and are perhaps unconsciously building up a popular antagonism to the organized medical profession.

This subject is so vast, and there are so many details in the different systems of the different countries that it is next to impossible for the individual physician to have any true conception of just what attitude he or his association should take when the matter of health insurance is brought up. Then what shall we do and how can we solve the many problems now confronting our profession?

Personally, I do not know the answer. I believe, however, that we are in the midst of a great social revolution, the exact causes for which, and the exact remedies for which no one seems to know. Charles Benedict says in an article, in the January 1, 1933, issue of the *Magazine of Wall Street*, that: "As one reads the voluminous report of the President's Committee on Recent Social Trends, the impression deepens that we are in the midst of a crisis that differs as profoundly from any of the past, as revolution differs from revolt. We have seen a dismaying number of powerful forces that point towards painful reorganization of our social, political and economic fabric. We are caught in a whirlpool of change that seems at times to threaten the fundamentals of our present order." Again Moody, the statistician, states: "Once economic paternalism of the scope of certain proposed laws is established; steady pressure will begin in the

same direction, leading to what eventually may become a clear case of State Socialism."

Enough has been said to show the existence of some of our problems, their ramifying vastness and the difficulty of their solutions. Attention has been called to the mistakes made by our profession in other countries. So let me make a few suggestions for us of the Florida Medical Association, which might save us some costly mistakes, and might be a valuable means for solving our problem.

I believe that the Florida Medical Association should, through its President, appoint a well and carefully chosen committee for the study of the economic and social problems of medicine, to be known as the Committee on Social and Economic Problems, and to work in conjunction with the Public Relations Committee, and our Legislative Committee. Such a committee should give a detailed report of its studies and work to our Association each year, with its recommendations for action. Also I believe a Department of Medical Economics should be started in our State Journal in which the chairman of the above committee could each month discuss the work of his committee and otherwise keep the profession advised on this vital subject.

It is important that the profession of our state be awake and on the job, be prepared with a definite program, and be ready to assume a position of leadership in the solution of all matters affecting the economic and social phases of medicine, or which may be concerned with the health of the people of the state.

A beginning was made during the political campaign of 1933, when our present president secured from all the candidates for Governor a promise to consult the Florida Medical Association in all appointments or other matters of legislation concerning the health of the people. This is necessary not only in the interest of the profession, but of the public also. England found (though not at first) that the cooperation of the medical profession was absolutely necessary. When the British scheme was in progress of formulation, the medical profession was almost entirely disregarded by the politicians, trade unions and social workers. Alfred Cox, secretary of the British Medical Association, states that: "It may be said, without fear of contradiction, that the determination the profession showed, and the sympathy it was able to enlist among the public and in parliament, made it impossible for the

future, that any bill of any consequence affecting the medical profession should be introduced without consulting with the British Medical Association."

This happy condition cannot exist in Florida unless our Association knows what it wants, has a definite plan, educates its members and the public, and unless every individual member plays his part by whole-hearted cooperation. These problems are being discussed by some of our County Societies, as is shown by a report in the January issue of the State Journal. Also in the same issue it is stated that a "Florida Health Service Association has been organized in Orlando, which offers for \$1.00 a month to give to its subscribers medical attention and hospitalization, including operations, laboratory work, etc. A similar plan is being practiced by hospitals in various parts of the United States, notably Sydenham Hospital in New York, the Sisters Hospital in San Francisco. Insurance companies are working out plans. The October 15, 1932, issue of the *American Medical Journal* gives a detailed account of a plan now being sold by the Columbia Casualty Company which has been organized by interests allied with the Ocean Accident and Guarantee Company of London.

I do not believe that our problems can be solved by individual members of our Association alone, nor by county societies alone. It is very commendable that they are thinking and putting forth effort, and doubtless valuable information and data will come from these sources; but the final plan must be the unanimous conclusion of the profession of Florida. We must know what we want and have a method of presenting it to the profession, to the legislature or other public bodies, in an authoritative way.

When the final plan is formulated and adopted—kick, if you must, but stick. When the pulling is hard, every oar is needed. Not so long ago, I heard Dr. Fosdick compare life to a game of golf. Some are called upon to make the spectacular shots from the bunkers or over the hazards, while some can only execute the six-inch putts on the greens. The "six-inch putt" is just as important as the drives or the more spectacular shots in the game of golf, and in Life.

No matter how small you may think your influence as an individual or as an organization, your thought and your effort are necessary if we solve the many problems now confronting our profession. I ask you, as individuals, and as an

Association to "do your putt," and help the profession of our state to solve these and many other problems, so that it may assume the leadership that rightly belongs to it.

DISCUSSION

Dr. G. H. Edwards, Orlando:

I think that my friend, Dr. Dozier, has given us a very clear presentation of our present economic status. He has, however, failed to give us any suggestion as to a solution. I think this is with intent, and probably just as well. I think that you and I have read so much and listened to so many solutions in the past few months that we are almost lost. We are confused. I feel that neither state medicine nor health insurance is going to satisfy the profession or the people. You know we are a wonderfully easily led group and still we are wonderfully resistant. We will do all sorts of crazy things. However, I think there is going to be no rapid readjustment or solution and no Utopian plan adopted. Whatever change that does take place will be a gradual one—evolution.

I feel there are two ways open now. We are working toward them. First, the welfare group might well bring to us the indigents and the city, county or state pay a certain amount for their care, giving us more time to look after our needy who are unable to meet entirely the present cost of medical care. In Florida we already have a law providing for county health units. It seems to me that that is another way, that we should look toward that as a solution.

The following quotation from an editorial in the January issue of the Journal, expresses my feelings on this subject, and is rather sound, I think:

"We are constrained to believe that the best interest of medicine, and the public, will be served by pigeon-holing the whole report. We further are constrained to believe that each community should take care of its own medical indigent by the organization of a full-time county health unit, which the Florida Legislature has already authorized. Each unit should employ enough physicians to handle all indigent sick; indigency being determined by a welfare investigating group. If a county or city hospital exists, those needing hospitalization can well be taken care of, but when no county hospital is available, those needing hospitalization should be cared for in private institutions at a substan-

tial, patient per diem rate. Thus the poor are cared for.

"Those not indigent should still be permitted—shall I say by our paternalistic government—to employ the physician they deem best fitted to meet their needs. The rich can pay—some of them do not—thus the rich are cared for. The great group of people in moderate circumstances, if they will but take their family physician—and every family should have one—into their confidence, can have all the attention needed at a fair price. True disciples of Aesculapius are ever charitable—thus the moderate circumstanced are cared for." Utopia!!

Dr. Mary Freeman, Perrine:

I have no idea how the trouble is going to be remedied, but it will have to be remedied some way.

In my practice, which is a country practice among working people, the laborer this winter got anywhere from one dollar to one dollar and a quarter a day and did not work every day. Of the forty-eight deliveries that I made last year, but three were able to pay in full when the work was done. The others paid anywhere from nothing to fifteen dollars. A good many of these were difficult cases. I have found that when times get hard, maternity work gets hard. The stress that is laid on the mother will produce dry births and a whole lot of abnormalities that we don't have when times are normal. For these forceps and podalic versions, a good many, I got nothing at all. This group of families was the poorest.

I carry the burden just as long as I can, and when it gets too hard where I can't get gasoline, medicine and dressings out of it I have to turn them over to the county. But, when we send them to the county it comes out of our pockets in taxes. Something needs to be done. I don't know what.

Dr. Paul Eaton, Jacksonville:

There are just a few remarks about one point that I would like to bring to your attention:

A number of agencies have been giving publicity to the well known fact that medical costs are increasing. They are, but even the Ford costs more than the horse and buggy. Medical costs have increased, but medical services are worth more and you don't hear anybody emphasize that. We should bring to the attention of these people the fact that medical services are worth the additional cost, if their lives are worth anything. These services are the agent which has prolonged our lives 20 years during the past

quarter of a century. Therefore they are worth money. The inference being broadcast by many of these agencies is that the doctors are getting a lot more money. Of course they are—some of them—but for services that are valuable or worth while.

Another thing: Once upon a time in a theatre I saw this actually happen. A girl who weighed about one hundred pounds invited six strong men from the audience. She then gave them a stick and had each take hold of it in his right hand and start pressing down with the stick. When she had them fighting subconsciously she took one finger and held the stick up from the floor. True, they pressed down to the floor, and it was a wonderful thing to watch. But she had them fighting unconsciously against each other, so that some were pulling up while others were pulling down. The medical profession!

THE COMMON COLD—ITS COMPLICATIONS AND SEQUELAE*

CORNELIUS G. COAKLEY, M.D.,
New York.

There is no infection so frequently met with as a cold—by this we mean an acute infection of some or all portions of the mucous membrane of the upper respiratory tract. The disease symptoms vary with the portion of this tract which may be the most intensely involved; hence, it includes acute rhinitis, naso-pharyngitis, pharyngitis, laryngitis, tracheitis and bronchitis, or the popular names for them, such as cold in the head, sore throat, cold in the chest, etc. We are also of the opinion that most cases of tonsillitis have the same etiology as the common cold and should be so regarded. If the pathological changes of a cold were limited to the mucous membrane of the upper respiratory tract, viz.: nose, pharynx, larynx, trachea and bronchi, the resulting disability for work and the mortality would not be very great. Unfortunately many *complications* and *sequelae* arise as a result of these infections. The most frequent complications are, para-nasal sinus infections, acute otitis media, conjunctivitis, cervical adenitis, broncho-pneumonia and lobar pneumonia.

From these complications many patients make a good and complete recovery, but in other cases sequelae develop in near-by or distant organs. Thus if the para-nasal sinus infection persists and becomes chronic, it may be the focus of in-

*Lecture delivered at First Post-Graduate Medical Course, Gainesville, June 19-24, 1933.

fection sought for by the internist to account for acute or chronic arthritis, endocarditis, myocarditis, nephritis, optic neuritis, keratitis and meningitis. Orbital cellulitis and orbital abscess is practically always a sequela of an ethmoiditis or sphenoiditis. The cause of most nasal polypi is an accompanying sinusitis.

Acute otitis media may develop into a mastoiditis followed by such serious lesions as sinus thrombosis, pyemia, meningitis, epidural abscess, cerebral or cerebellar abscess, or the mastoiditis may become chronic and lead to a long-standing foul discharge from the ear and usually considerable impairment of the hearing of the diseased ear.

The broncho-pneumonias and lobar pneumonias, especially in children, and the aged, are serious complications whose sequelae may be asthma, bronchiectasis, and lung abscess.

Just what etiological bearing the swallowing of infected material from the nose and pharynx may have on some cases of gastro-intestinal infections, acute cholecystitis and acute appendicitis is a matter of uncertainty, but clinical evidence seems to bear out the view that those diseases are so caused in a small percentage of cases.

Now in regard to pulmonary tuberculosis most patients will give a history of a bronchitis antedating any discoverable evidence of tubercular invasion. The damage done to the epithelial lining of the bronchioles and alveoli of the lung during an acute bronchitis affords an opportunity for the invasion and growth of the tubercle bacilli. Without such preceding bronchitis there would be many fewer cases of pulmonary tuberculosis.

If you accept my view that most cases of tonsillitis belong to the common cold type of infection, then peritonsillar abscess, acute arthritis of the rheumatic type, acute nephritis, acute pericarditis and endocarditis and chronically infected tonsils are frequent complications and sequelae. As exceptions to the cold theory of the cause of tonsillitis I would place those due to the specific infectious diseases as scarlatina and those due to infected milk or other food products.

We are all agreed that the common cold is some sort of infection. Much research has been done and is still going on to determine its cause or causes. If the laboratory workers do determine it and find a vaccine or similar substance to control it as has been done in the case of diphtheria, the number of otolaryngologists needed to care for conditions in their field could easily

be reduced 90% with no resulting hardship to the community. The internist would also be called on for not more than half of the work he now does, and would be mainly occupied with preventative medicine.

The December, 1932, issue of the *Annals of the Pickett-Thomson Research Laboratory*, "The Common Cold," a volume of some 750 pages, gives a resumé of all of the work done on this subject up to the time of its publication. I shall quote from it and desire here to express my thanks and appreciation to the authors, David and Robert Thomson, for the immense amount of valuable material contained therein.

As a preliminary step to determine what if any bacteria are the cause of colds it is necessary to know whether any, and if so what bacteria may be found in the various parts of the upper respiratory tract.

Nose: "All workers are agreed that the vestibules of the nares, the vibrissae lining them and all crusts formed there are commonly swarming with bacteria." (I, page 30.)

On the other hand if care be taken to prevent contamination at the vestibule of instruments and swabs, cultures from within the nose are almost always sterile, or contain a few colonies of staphylococcus albus and diphtheroids. This is accounted for by the mechanical filtering action of the vibrissae and the fact that the cilia waft the few escaping bacteria quickly back to the naso-pharynx and that the nasal mucus if not strongly inhibitory to the growth of bacteria does not afford a medium for their growth.

Para-Nasal Sinuses: The para-nasal sinuses normally are bacteria free.

Naso-Pharynx: "Cultures from the naso-pharynx yield more colonies and more species of bacteria than those of the nose. They are much less numerous, however, than in cultures from the mouth. As a breeding-ground for bacteria therefore the mucous membrane of the naso-pharynx lies midway between that of the nose which is an unfavorable habitat, and that of the throat and mouth which is an extremely favorable habitat.

"The naso-pharynx has a more or less characteristic flora also which is different from that of the nose and mouth in certain respects. Thus the naso-pharynx frequently contains pneumococci and the adenoids more especially in children often show hemolytic streptococci. Gram negative cocci of the catarrhalis group are also very frequently found in this region." (I, p. 45.)

It is interesting that Zinsser found meningococcus in the naso-pharynx in 2.5% of healthy individuals.

Throat: The mouth from the bacteriologist's point is a veritable and favorable laboratory for the growth of a great variety of organisms, both pathologic and otherwise.

1. Streptococci hemolytic, non-hemolytic and viridans.
2. Micrococcus catarrhalis in several varieties.
3. Pneumococci frequently and principally type IV.
4. Staphylococci.
5. Diphtheroid group.

Others such as influenza and Vincent's occur infrequently.

Larynx, Trachea Bronchi and Alveoli of Lungs: As for the first three the evidence seems that a few bacteria may be present, but that they all disappear in the alveoli.

During an attack of a cold one or more of these organisms may be found in enormous quantities in the discharge from the nose, pharynx, larynx and trachea. This has given rise to the belief that the predominating organism found was the real cause of that particular cold. It sometimes happens that where the investigation has extended over several colds in the same individual there was found to be a different predominating bacterium in some of these attacks. Thus one might have a pneumococcus cold in one attack, a micrococcus catarrhal cold in another, an influenza cold in another. It has also been noted that in the very early stages of a cold when one has a profuse watery discharge that few or no bacteria can be found. Those who hold to the multiple bacterial origin of colds account for this on the theory that the bacteria have not multiplied to the extent that takes place a little later, and consequently there is a scarcity of them in the large volume of secretion eliminated. On the other hand, a group of observers, among whom Dr. Dochez of Columbia University is best known, have sought in the watery secretion of the early stage to find a source of infection. This they seem to have done by collecting the watery secretion and passing it through a Berkefeld filter and using this filtrate, which contains no visible bacteria, for experimentation first on monkeys and later on men.

They have been able to culture from this secretion organisms too small to be seen with a microscope and using the filtrate from these cultures get positive reactions in the form of colds when the filtrate is sprayed into the nose. In

their experimental work they have produced all the symptoms of an early cold after an incubation period of one to three days. In cases that could be kept in a bacterium-free room the symptoms subsided in a few days with little constitutional disturbance. If, however, they were in ordinary surroundings, they developed all the manifestations of the common cold in varying degrees and accompanied by the usual bacterial findings of the secondary invading bacteria.

We thus have two schools of research workers:

First: Those believing in the infectivity of colds directly due to one of several varieties of bacteria, each of which has several sub-varieties. If this is the correct theory the chances of our being able to control to any great extent the incidence of colds is small. It also may explain why vaccines used as a preventative of colds do not always accomplish their purpose. The mixed strains used may not be those which are most needed for any particular infection.

Second: The filterable virus school believes that a virus originates an infection and that the inflammation induced makes possible the invasion by the well-known pathological bacteria which carry on in greater or less activity, and therefore severity, according to the virulence of these secondary invaders.

Dr. Dochez is quite convinced that this filterable virus theory is the correct one. That being so he is striving to see whether he can immunize monkeys and man against the toxicity of this virus. If so, there is great hope that we shall be able to prevent a cold and thus avoid the many serious consequences that follow.

How do we catch a cold?

There are two ways:

First: By being infected with the discharge from the nose or throat of one who has a cold.

Second: Auto-infection by being infected with the bacteria which all of us have in our respiratory tract.

Under the first heading it is common knowledge that close contact with one having a cold is quite apt to result in contracting the disease. Every act of sneezing and coughing sprays a fine or coarse fluid into the atmosphere for a distance of from one to three feet. The larger drops quickly fall to the ground but the finer ones may float around in the atmosphere for some time and be breathed in. They are composed of a mixture of water, mucus and epithelial cells containing many bacteria. If we are breathing normally through the nose, most of these bacteria will be

prevented from gaining access to our nasal mucosa. Enough may enter to incite a rhinitis, but, if mouth breathers, we may be taking in a new and virulent strain which proceeds to induce a pharyngitis.

There are probably several factors entering into contracting a cold from one who is infected.

1st. It is pretty definitely proved that during the first two or three days of a cold the danger of infection is greater than in the later stages.

2nd. The closer the contact the greater the danger of infection. If either my chauffeur or I have a cold the other is sure to develop one.

3rd. A short period of contact may not result in an infection. The few bacteria entering our noses or throats may be cared for by the defensive mechanism. Repeated reinfections from the same or other cases, however, may finally result in a cold. This will account for the late appearance of a cold in some individuals in a family when precautions are taken to isolate as far as possible the sufferers from a cold.

4th. We recognize a great difference in individual susceptibility to contracting colds. On what this difference depends we do not know. Handkerchiefs of the patient are teeming with bacteria and when dried and handled the bacteria may be suspended in the air and so inhaled. Our clothing will likewise contain the bacteria and they may be viable for some time. The closer the contact with the infected person the greater the danger of contracting the disease. This will explain the frequency with which epidemics occur in crowded rooms, such as schools, and why after going to the theatre we often find ourselves later with a cold.

A most interesting report is that of Heinbecker and Irvine-Jones:

"During a trip up the west coast of Greenland we noted that in certain of the settlements every native was the victim of an acute respiratory infection, while in others no evidence of infection was present. Investigation revealed that in the former some contact had invariably been made with the outside world prior to their coming; while in the latter group within from 48 to 72 hours of their arrival all of the natives developed acute respiratory infections with sneezing, coughing and spitting. Farther north among the polar Eskimos where it was certain that no outside contact had been made that year there never was the slightest evidence of acute respiratory tract infections at the time of arrival of the expedition, but within 72 hours nearly every Es-

kimo of the settlement developed such an infection." (I, p. 571.)

We have a similar phenomenon in our city. Most of the students in our private schools spend their long vacation, June to October, in the country, either mountains or seashore. They, of course, lead an active outdoor life and the parents report most are free from colds during this entire period. Within a week of their return to school they develop colds in all probability contracted from some carrier.

The period of incubation of colds is pretty well established both clinically and experimentally as from 2 to 4 days.

The question of the length of immunity that an individual may acquire as the result of a cold is an important and undetermined problem. Some persons have only an occasional cold while others have frequent attacks during the year. Many of the latter have pathological lesions in the upper respiratory tract which render them more susceptible to the infection. Most clinical observers believe that a few weeks at the most is all the immunity that can be expected.

Second; Auto Infection: Under certain conditions and without apparent contact with one having a cold, we develop one. Familiar examples are: sitting in a draft, especially when overheated; waking up chilled with insufficient bed-clothing, or, especially in children, finding the bed-clothing off; getting the feet wet and keeping the wet shoes on while not exercising.

Much experimental work has been done to determine the effects of drafts and exposure on the mucous membrane of the upper respiratory tract. It has been found that there is a perceptible diminution in the temperature of the mucous membrane of the nose and throat with a dryness of the same. Owing to the contraction of the skin capillaries and lessening of the acid perspiration the urine becomes more acid and there is a lessening of the alkalinity of the saliva. There is, therefore, considerable reason for administering large doses of an alkali (soda bicarb.), in plenty of water in the early stages of a cold.

The local interference with the normal secretion in the nose and throat permits the bacteria to multiply faster than the defensive mechanism can control them and they produce an infection. In my own case I have noticed that when I have contracted a cold as a result of exposure the first symptom is either a dryness and soreness of the throat or a dryness and pain high up in the nasopharynx. Only after a day or two is there any

nasal discharge. You will recall that the pharynx, and to a lesser degree the naso-pharynx, are habitual harbingers of bacteria capable of becoming secondary invaders of colds. There are other factors, such as fatigue, improper diet, vitamin deficiencies, lack of exercise, living in insanitary surroundings, and habitual mouth breathing which pre-disposes to colds.

Epidemics of Colds: While it is certain that in any part of the country that I am familiar with there is no community of any size in which some member is not afflicted with a cold; there are times in the year when a considerable portion is so afflicted. Not only is this so for any particular community but these cold epidemics are pretty universal throughout the country at approximately the same time. There is usually a mild epidemic in September when the weather turns suddenly cold after a hot spell, and an epidemic in December and January usually of greater severity of symptoms.

The September epidemic comes with the return of window-closing and less ventilation in our houses, but undoubtedly the atmospheric changes on the mucous membrane have much to do with it.

The December epidemic has the same atmospheric underlying cause, and, in addition, we have been living for several weeks in artificially heated rooms. The extra work demanded of our respiratory mucous membrane in rooms artificially heated after a time makes them less resistant to infection, and when it does occur the involvement is apt to be more severe. Having a house in Florida I have endeavored to go there as early in December as my college work will permit. Some years I have escaped my cold but other years I have had to take it with me.

During the time when colds are epidemic it is not unusual for the populace and the profession to call these infections influenza or grippe if there is a tendency for considerable constitutional disturbance such as temperature and a general aching. This assertion may be correct but without bacterial examination of the discharge it is not necessarily true. The influenza bacilli may be found in the mild attacks as well as in the severer ones. The streptococcus colds are many of them accompanied by the same aches and pains and rise in temperatures as those associated with the influenza bacillus. It has been noted, however, that the tracheal inflammation associated with the influenza bacillus is apt to be more severe and

more prolonged than similar inflammation due to other bacilli.

One of the most interesting studies in colds is that of McCann and Smillie. They examined the normal bacterial flora of the inhabitants of the Island of St. John (W.I.) and again when the inhabitants developed the cold. "The observations were continued for a year. Records were also kept of daily maximum and minimum temperature, humidity, barometric pressure and rainfall. The population is about 700 negroes and 8 white people. There is very little movement of the population and very little communication with the outside world. Scarlet fever and diphtheria are unknown. A few cases of measles have occurred in adults, but none in children. *Tuberculosis is not common* and pneumonia and typhoid fever are rare. There was no malaria. Colds were prevalent but very mild. These divided into four groups:

"1. Very mild slight nasal discharge and cough for a few days. No other symptoms.

"2. More severe with malaise but no fever.

"3. More severe with T. 100 F. for a day or two.

"4. Severe confined to bed with T. 101 or higher.

"During the year in a population of 223 persons there were 184 colds.

"Over 80% of the colds were mild and only 3.8% were severe. This is a much lower incidence than in U. S. A. which averages 2 colds per person per year with a much larger percentage of severe cases.

"The following bacteria were found:

"*Gram negative cocci* in health and when infected with colds.

"*Staphylococci*—but not more so when colds were prevalent.

"*Influenza*—several strains but no relation was observed between the increased prevalence of any of strains and the incidence of colds.

"*Hemolytic streptococci* were rare.

"*Streptococcus Viridans* very abundant at all times of the year.

"Pneumococci were found in about 40% of cases examined; most were type IV and type III in eight cases.

"A few other varieties."

The same authors studied colds in Southern Alabama and in Labrador, and conclude—

(1) That colds are less common and much less severe in the tropics than in the Temperate Zone.

- (2) The basic naso-pharyngeal flora in normal persons in St. John is similar to that of normal persons in Labrador and Alabama. Influenza bacilli are much less common in St. John than in the Temperate Zone. Hemolytic staphylococci are prevalent in the Tropics; hemolytic streptococci are rare; pneumococci are prevalent in St. John but are avirulent. Types I, II and III are rare.
- (3) The basic naso-pharyngeal flora in St. John was quite constant throughout all seasons and in all groups of people. No change occurred in the naso-pharyngeal flora in a group of people who developed colds.
- (4) The seasonal incidence course of acute colds in St. John was a replica in miniature of the same course for the United States. No colds occurred during the very warm period from June to October. An epidemic of colds in December was coincident with a slight but abrupt drop in atmospheric temperature.

Symptoms of a Cold: One usually has a chilly sensation definitely marking the onset to be quickly followed by a local manifestation in that part of the upper respiratory tract first involved, viz.: a dryness of the nose, an ache in the naso-pharynx, a dry and sore throat or stinging in the larynx. The subsequent course will depend upon the area affected and its extension to contiguous regions. Thus one individual will have the major invasion in the nose and pharynx, another in the pharynx, larynx and trachea, while others will have the entire upper respiratory tract involved about equally.

The head cold type soon develops a profuse watery discharge, which in a couple of days becomes thick and muco-purulent; this latter condition is presumptive evidence of involvement of the para-nasal sinuses. There is a mild conjunctivitis, tearing, owing to the obstruction to the lachrymal duct; stuffiness in the ears, owing to eustachian tube obstruction, perhaps tinnitus and impaired hearing; a dull headache caused by complete nasal obstruction, perhaps a slight rise in temperature, a general indisposition to do usual work. The symptoms may last a few days, or, if complications develop, several weeks.

The throat or chest colds are bothered with a persistent dry cough at first. This is later followed by voice changes, either slight hoarseness

or almost aphonia. After a few days thick yellow muco-purulent secretion is brought up with the cough, the amount varying with the extent of the involvement of the tracheal and bronchial mucosa. Occasional blood-streaked sputum may be noted as a result of the rupture of small congested veins.

Our clinical observation is that bronchial colds last longer than the head colds, and should be given special care, especially in children and the aged. Many of the latter (aged), do not recover while remaining in our northern climate in the winter, but clear up very quickly in this glorious Florida climate.

Treatment: Not one person in ten who contracts a cold applies to a physician for a thorough examination and treatment. They rely on home remedies and the various advertised patent medicines. Hence the very large number of chronic sinus cases and the many cases of advanced tuberculosis that eventually come to the physician. A certain amount of blame attaches to physicians when consulted for a cold. Most of them simply ask a few questions, and without making a thorough physical examination, which should include the nose, sinuses, ears, larynx, trachea and bronchi, sputum, blood, urine, and if necessary x-rays of the sinuses and chest, write a prescription. Such an examination requires time, and involves expense which often the patient is unwilling to undergo.

The treatment of a cold depends upon the stage. Some believe that treatment does not alter materially the course but I do not agree with them. Unquestionably with the first symptom if the patient goes to bed, covers up warmly, takes hot alkaline drinks, a mild cathartic, a Dover's powder to induce sweating, a good dose of quinine or aspirin if there is much aching, the subsequent course is mitigated.

For the nasal hydrorrhea and stuffiness frequent nasal spraying with adrenalin or ephedrine followed by a weak 1% menthol spray in oil gives great relief. In this stage atropin 1/150 gr. Q+H until the pupils are dilated is also helpful. There has recently been put on the market a nasal bacteriophage which in some cases has seemed to be very helpful.

For the pharyngeal cases, gargling, or better, irrigation with a hot 2% solution of soda bicarb. gives much relief. In the laryngeal type, the cough which is so persistent and often harmful, by the trauma produced to the vocal cords, should be controlled with codeine.

In the later stages of the nasal type when there is much secretion, contraction of the swollen nasal mucosa, night and morning with 1% cocaine and ephedrine, and after waiting 10 minutes, irrigating the nose with normal saline is most helpful and in addition to letting the patient have nasal breathing, allows the accompanying infection of the sinuses to drain, which they could not do so well while the nose was so obstructed.

In the laryngeal and tracheal type expectorants give great relief.

Prevention of Colds: This is an important problem, the solution of which must await the results of the investigation of the filterable virus school. Should they find a substance to immunize us against colds, even if it must be repeated at short intervals, a great advance will have been made.

Our clinical experience with polyvalent vaccines now on the market, and with autogenous vaccines is that only a small per cent of patients treated are relieved and a few are made worse.

The victim of a cold should be compelled to take ordinary precautions about spreading the infection. Sneezing and coughing should be done only when the face is protected with gauze, of several thicknesses of fine mesh. This gauze should be placed in a covered receptacle kept for the purpose and subsequently burned. When handkerchiefs are used and kept in the pocket the clothes are infected and form a source of infection. While at work, or going to and from work, if the victim wore a mask similar to that worn by surgeons when operating, the scattering of the infection broadcast would be prevented. The masks would have to be changed frequently and burned. I am afraid that it will be some time before this practice will become fashionable or be required by law.

To those who have not a cold, keep as far away from the infected as possible. During the season of prevalent colds, avoid crowded places, theatres, stores, railroad trains, etc. During the winter quite a number in our colony in Florida while perfectly well on leaving home by train, arrive with a cold, and the same happens on the return trip. So many cold victims go south that the carpets and blankets become infected and the dried but active bacteria infect the passengers.

Avoid drafts, exposure to wet, eat and drink moderately and wear proper clothing. Some think that gargling and nasal sprays lessen the chance of infection, but I doubt it.

INTRACRANIAL COMPLICATIONS FROM APPARENTLY TRIVIAL SOURCES*

CASE REPORTS

S. A. SHOEMAKER, M.D.,

Orlando.

I present a subject which has appealed to me for a number of years, and yet about which comparatively little is said in medical meetings or in our literature, although intracranial affections in their general scope have received ample discussion. I confine my paper to a limited field of intracranial diseases, namely, thrombophlebitis of the cavernous sinus; and I limit it still further to those cases arising from slight peripheral lesions such as: pimples and blisters on the face, especially near the angle of the nose. I believe the importance of the relation of peripheral infections to the deeper and vital structures is underestimated by both the laity and the profession. There is a general tendency to lay small stress on certain commonplace lesions which are a potential source of infections that often terminate fatally. These considerations and the fact that many of these humble sources of infection could be easily controlled if treated in the right way and at the right time, or if properly left alone, have prompted me in presenting this paper.

If we depended solely on medical literature we would conclude that thrombophlebitis of the cavernous sinus from these sources is a rare occurrence. But clinical observation gives us a different impression. Personal inquiry among colleagues reveals that these cases are not so rare. The rather frequent occurrence of sinus thrombosis and its high mortality rate and the frequency with which it is not recognized before it is too late is still further justification for its consideration.

Dr. Wright of Philadelphia calls this "the dangerous circle of the face," and adds that the causes of these complications and their unfavorable termination are partly due to a combination of anatomic and pathologic factors and partly to injudicious squeezing of the infected area.

My attention was gripped by this subject 21 years ago when a neighbor of mine, a young man in the bloom of health, died within a few days after picking and squeezing a pimple on his lip. From that time to this I have been deeply interested and have been collecting data and cases.

*Read before Orange County Medical Society, Orlando, April 19, 1933.

I gratefully acknowledge indebtedness to Dr. Wright of Pennsylvania, to Dr. Richards of Indiana and other colleagues in The Academy for the kindly way in which they responded to my requests for clinical opinions and facts used in the preparation of this paper.

Thrombosis of the cavernous sinus may arise from various sources, such as a scalp wound, a carbuncle on the neck, from furuncles, styes and pustules on the eye lids; from pimples, infected wounds and erysipelas of the face and blisters on the upper lip; from ulcers of the nasal mucosa; from the paranasal sinuses, especially from the sphenoidal and ethmoidal; from the periapical abscesses and carious teeth; septic tonsils, suppurative otitis media, mastoiditis and from cellulitis, abscesses and periostitis of the orbit.

From such varied sources as all these there surely must be many more cases than are reported in the literature. Dwight and Germain in 1902 reported 178 cases. Smith in 1918 estimated that less than 300 cases had been recorded. Grisholm and Watkins found but 8 cases in 50,000 surgical records of the Johns Hopkins Hospital. A prominent brain surgeon of Boston wrote that the only case he could recall in all his experience was a traumatic one that occurred from an injury while packing the cavernous sinus in the course of a gasserian ganglion operation thirty years ago at the Johns Hopkins Hospital.

Dr. Wells P. Eagleton reports 25 personally observed cases with 21 deaths and 4 recoveries.

Dr. Richards saw 4 cases in 4 years—2 from ethmoidal and sphenoidal sinus infection and 2 from furuncles on the nose and lip—all of which died.

Dr. J. William Hinton in 1927 published a paper in the *Annals of Surgery* on dangerous infections from this region and cautioned against any form of treatment that would traumatize the original focus.

July 25th, 1931, Brown, in the *Journal of the American Medical Association*, reported cavernous sinus thrombosis arising from infections on the nose and upper lip and warned against the dangers of incision.

One reason why so few cases are reported is probably because the old classical symptoms—exophthalmos, edema of the lids and chemosis—are not always present; also many cases are never diagnosed because no autopsies were held. Some cases are not reported under their true category because of the chagrin it would occasion for a

patient to die from so small a thing as a pimple on the face. I recall one such case in which the cause of death was recorded as being pneumonia.

Many cases are reported in the death returns as blood poison, meningitis, septicemia, brain fever, brain abscess, erysipelas, etc.

Frequently these cases are mistaken for ethmoiditis, frontal sinusitis, orbital cellulitis or orbital abscess, sphenoiditis or pan-sinusitis.

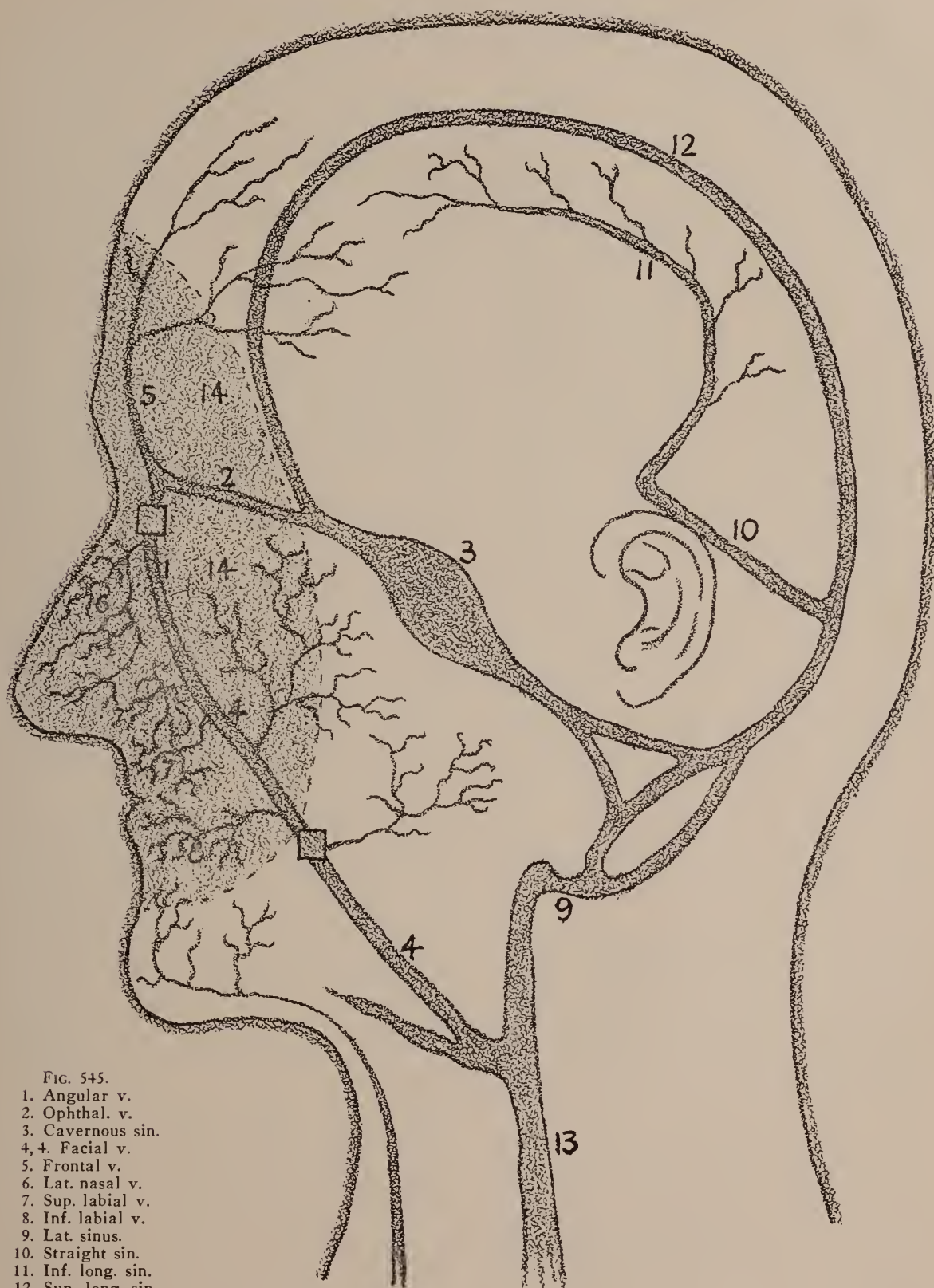
Anatomy—Valveless Veins.—Our appreciation of the ease with which infection may pass from a pimple in this region to a brain structure will be aided by remembering that the veins leading from the lip and nose have very few valves, if any at all. These numerous and valveless veins leading from the site of the original infection to the veins emptying into the cavernous sinus make the passage of pathogenic bacteria and their products rapid and easy.

Other factors are the superficial situation of the veins, and the short distance the infection has to travel before it enters the danger area.

Angular Vein.—It might be well to recall that the lips and nose are drained by the facial veins via the labial and nasal branches into the external jugular vein. The angular vein situated on the upper inner aspect of the nose serves as a short circuit between the nasal and frontal veins. (See diagram.) The latter empty into the superior ophthalmic veins and thence into the cavernous and subsequent sinuses. The angular vein connects the superficial facial venous system with the deeper intracranial venous channels. The importance of the angular vein as a conveyor of infection to the intracranial sinuses is at once apparent. Infections of the face which do not involve the angular vein seldom prove fatal, whereas infections which pass through this vein almost invariably cause septic thrombophlebitis of the intracranial sinuses and terminate disastrously. The angular vein has been aptly termed the corridor of death.

Lymphatics.—The lymphatics guarding the vestibule of the nose are situated under the mandible and being so far away from the site of the conflict and having such a devious and roundabout way of marshaling the leukocytes into action are unable adequately to cope with the situation. The infecting organisms rush pell mell past the guards and float away in the venous blood stream until they enter the cavernous sinus to begin their deadly work.

Clinical Picture.—A patient comes to a physi-



1. Angular v.
2. Ophthal. v.
3. Cavernous sin.
- 4, 4. Facial v.
5. Frontal v.
6. Lat. nasal v.
7. Sup. labial v.
8. Inf. labial v.
9. Lat. sinus.
10. Straight sin.
11. Inf. long. sin.
12. Sup. long. sin.
13. Jugular v.
- 14, 14. Dangerous Circle
of the face.

cian with a sore in the nose or blister on the lip and is told that it is nothing but a pimple at the root of a hair which will disappear in a few days without treatment. Armed with this assurance the patient goes home and proceeds to pick the pimple with unclean nails, or with some instrument that has not been sterilized. Here no doubt a new type of pathogenic organism is introduced and thus we have a mixed infection, some of which may show a predilection for the venous circulation. Not content with picking the sore the patient decides he will expel the poison by squeezing. Contrary to his purpose he squeezes the infection in instead of out. He drives it past the zone which nature has kindly thrown around the sore to limit it to a circumscribed area. This squeezing traumatizes the inflamed area forcing the infection into new territory and into the circulation. Having thus bruised the furuncle he soon has more pain at the site of the lesion; next day he has fever, which increases day by day until it reaches 105 to 107 degrees; swelling of the nose and lip; swelling of one eye and then later usually both eyes; increasing pain in the head; often delirium; orbital structures and lids enormously swollen: exophthalmos often extreme so that the lids will not close; chemosis of the conjunctiva protruding the size of a peanut; sometimes chills and fever continuing to mount to the fatal end, which is usually in 5 to 7 days. Of course, a few recoveries are recorded but death is the rule. The symptoms will be further brought out in describing the cases which follow. I describe two cases of which Dr. Richards was in charge.

CASE REPORTS

No. 1.—A barber came complaining of a sore in the nose causing him headache as well as pain in the nose. The small circumscribed pimple at the root of a hair just within the vestibule was easily located. The doctor sterilized the area with iodine, opened the sore widely and applied iodine. Next day the patient complained of more soreness in the nose and of more headache. The headache seemed to be at the base of the skull or, as the patient expressed it, back and above the roof of the mouth. The doctor examined the lesion and found it open and draining. He again filled it with iodine and sent him home and to bed.

Two days later he found him in a semi-comatose condition with a low mumbling delirium and temperature 105°. The left eye was protruding

and fixed and there was profuse conjunctival chemosis; the lids could not be closed over the globe. The central vein of the retina was struted with black blood and there was a choked disc. At the base of the nose, between the brows, was an abscess an inch long. Next day the right eye was affected with conjunctival chemosis, exophthalmos, fixation, etc. The delirium had ceased, but the patient was still in a comatose condition from which he never emerged. He died the next day, which was the seventh day from the time he was first seen.

No. 2.—A young farmer had a small sore in the end of his nose, but thought it of little importance. He tried to extract the hair about which the pimple seemed localized. He finally picked the top off the pimple and tried to squeeze the contents out. The second day the pain increased and he felt sick; had severe pain in the head; had to give up work and went to bed. He grew steadily worse and in two days called a physician who diagnosed the case as frontal sinusitis. Next day the eyes began to bulge, he was in extreme pain, had a high temperature and rigors. He rapidly went into a comatose condition with a temperature of 106° and was taken to the hospital. He died the seventh day.

I now quote expressions and opinions collected from several different rhinologists.

Dr. Lingemon says: "This condition, starting with an innocent, trivial infection around the angle of the nose or upper lip, proceeds many times to the cavernous sinus and becomes one of the most serious and fatal maladies with which we have to deal. There is nothing more tragic and hopeless than the picture which presents after the infection has left the angle of the nose and lip and entered the cranial cavity.

We should broadcast to the laity and our medical colleagues the importance of this dangerous area roughly comprised of the end of the nose, upper lip and adjacent parts of the face. Owing to the peculiar anatomy slight mismanagement will convert an innocent infection into a serious one. If we expect to save life we must save it before the infection gets into the cranial vessels. The fact that the original lesion is regarded as trivial causes it to be mistreated more than anything else."

Dr. Ravdin: "There is nothing I have so much respect for as pimples in the nose and I never open them. I recall a case in which an enthusiastic surgeon opened a pimple in the nose, per-

mitted the patient to squeeze it, developed a cavernous sinus thrombosis with all its classical symptoms. The patient died in a few days."

Dr. Eby: "Let us stress the importance of preventing surgical interference."

Dr. Griffith: "I believe we should impress upon the public and physicians the importance of not interfering with these things. Until they are walled off nothing should be done. Let them alone. We used to open furuncles in the ear; but we do not do that any more and we get better results."

Dr. Carmack: "There should be more papers written emphasizing the dangers, also emphasizing the fact that these cases should be treated medically. Personally, I use some sort of unguentine poultice. Something that will help this abscess to become localized and drain without incising."

We observe from the above expressions and descriptions of cases that evil results almost universally follow picking, cutting and squeezing these small furuncles or blisters on the face, and it is the consensus of opinion that the nearer they are to the central part of the face—the angle of the nose—the more dangerous they are. From here the route is shorter and easier to the brain owing to the arrangement and structures of the veins.

For years it has been my policy to forbid picking, cutting or squeezing. There is a saying as old as the history of medicine which goes thus: "*ubi pus ibi evacua*" (where there is pus let it out). But there seem to be some rational exceptions to this ancient rule.

Treatment.—I shall not discuss treatment except in its prophylactic aspect. It is rather the absence of treatment, especially such as would bruise the primary area of infection that I shall insist upon.

But we must do something. We must keep the patient's mind and hands busy. I have found it good practice to apply a wet compress of antiseptic solution—say bichloride, Dakin's or boric acid. Make it weak enough not to excoriate the skin. Have it changed every hour. It may have some therapeutic value and is sure to keep the patient and his friends from picking the sore with septic fingers, knives and hairpins. It favors localization. I have also used galvanism with good effect. I suggest 10 m.a., applied with the positive pole every four hours. The duration of each treatment, 6 to 8 minutes. It is antiseptic,

reduces swelling and relieves pain by its sedative effect; it diminishes active inflammation and is a vaso-constrictor.

Some physicians have found treatment with the Quartz light beneficial. Dr. V. W. Murray Wright recommends cautery puncture either with pure phenol or with the actual cautery needle. He warns against incision. Keep the patient quiet and in bed. Elimination and detoxication are important. Employ any needed supportive measures.

Doctors are sometimes importuned by the patient to do something heroic by making a bold incision in the hope it will more rapidly drain out. Instead of draining out it often drains in—into the cavernous sinus and from there into the undertaker's morgue.

I recall one case in which the patient asked his doctor to cut into his lip. The doctor replied it was not ready to cut. The patient said if he refused to cut it he would get someone else to do so. The patient insisted that it be split wide open for rapid drainage. The doctor split the lip, with the usual fatal termination.

These superficial lesions appear to be freighted with a higher mortality rate than the deformities and obstructions in the deep structures of the nose that require operations. This is likely due to the different venous arrangement for the return blood flow.

CONCLUSIONS

1. The region about the angle of the nose and lips has been called "the dangerous circle of the face."
2. Simple infections of the superficial central portion of the face are frequently fatal if disturbed.
3. Early palliative treatment is indicated.
4. The potential danger of these common and apparently innocent lesions is not appreciated by the laity.
5. We should teach patients the danger of traumatizing these lesions by picking, squeezing, and cutting.
6. Treat with antiseptic compresses changed often. Keep the patient and friends busy. Positive galvanism is good treatment.
7. Employ any needed supportive measures.
8. Keep the patient quiet and look after his general system.
9. Elimination and detoxication should not be neglected.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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WE SHOULD PONDER

When we read, or when we hear over the radio, the virtues of and wonderful claims made for various food products, especially the juices of certain fruits and vegetables, without which, it would seem, one could not grow to manly stature or vigor, we are impelled to wonder how it is that we were, at their age, more vigorous if anything than our offspring (pardonable pride and egotism) who were brought up on carefully proportioned diets, calories and vitamins being, supposedly, judiciously combined. The answer may be found in the conclusion reached by a group of careful scientific observers regarding our need of vitamin A supplement.

When we were boys, a grapefruit was unknown, an orange a rarity, a tomato or love apple was just beginning to find favor, it previously being considered poisonous, and carrots were fed to the cattle. Today all of them are considered—if we read and hear rightfully—to be indispensable to health and life. Like the little child who cried heart-rendingly because he wanted something, he did not know or care what, so we in spirit cry for something, presumably a panacea, and with eyes again bright are apt to grasp at and swallow every bizarre idea the detailer gives us regarding some new drug. What wonderful action and benefits are to be derived from using "our preparation" with Vitamins A B C and D from 10 to 250 plus. If all were true, instead of mere men, we would be fast developing into men mountains, invincible. But we are not; we still breed rather true to form, our ancestors' traits and characteristics cropping up in successive generations. Our span of life has been somewhat lengthened, but not due so much to new and increased potency of foods, as to the good and ever-increasing activities and efficiency of our public health minded leaders.

After reading the following findings¹ we may, with renewed assurance in ourselves, face the barrage of the voluble detailer, knowing that nature has provided us with foodstuffs containing all the needed elements, if we will but consume them, to keep us in at least a fair state of health and thus relieve us of one of the many and seemingly ever-increasing drains upon our purse.

"Forty infants were given large amounts of carotene daily, forty were given large amounts of haliver oil and eighty no vitamin A supplement; all likewise received viosterol. In the course of an observational period of five months,

frequent respiratory infections developed in all three groups, among those receiving vitamin A to the same extent as among the control group. Pneumonia and otitis media were not prevented. The blood in the carotene cases was saturated with the provitamin, as indicated by marked carotenemia. There is no clinical basis for considering or designating vitamin A the 'anti-infective vitamin.'

"The addition of cod liver oil to the dietary did not reduce the number of mild respiratory infections occurring during the summer months.

"Infections of the skin, impetigo, developed in the vitamin groups quite as often as in the control group.

"Inquiry throughout the United States disclosed that night blindness, the most delicate index of deficiency of vitamin A in the adult, is a very rare disorder and has not increased during the past few years.

"Our dietary is not deficient in vitamin A. A lack may come as the result of vagaries of diet or when absorption is defective; for example, in diarrhea or jaundice."

¹J. A. M. A., August, 1933.

DUES

It is provided in the By-Laws of the Association (Chapter VIII) that "The secretary of each County Society shall forward its assessment, together with its roster of all officers and members, list of delegates and list of non-affiliated physicians of the county, to the secretary of this Association thirty days in advance of each Annual Session." It is further stipulated that if a society fails to comply with this provision, none of its members or delegates shall be permitted to participate in the business or proceedings of the Association or of the House of Delegates.

It becomes necessary for the Business Office of the Association to close its books, as provided in this By-Law, thirty days in advance of the annual meeting. This means that the dues must be in the Business Office by April 1 of this year.

The Executive Committee has specifically ruled this year that all delegates who are seated in the House of Delegates at the annual meeting must be members in good standing. It is urged that the officers of each component county society stress to their members the importance of paying

their dues promptly in order that a full representation of each society may be had at the meeting of the House of Delegates.

The By-Laws further state that representation in the House of Delegates is based upon the paid membership of each component society. For each twenty members, or major fraction thereof, one delegate is seated from each county medical society.

CONVENTION NOTES

SCIENTIFIC PROGRAM

During the scientific assemblies, eighteen papers will be presented. The applications received were carefully studied by your Committee on Scientific Work, with regard to subject matter, qualifications of essayists and geographical representation. Ample time will be allotted to each essayist for the presentation and general discussion of his paper.

HEADQUARTERS HOTEL.

The local Committee on Arrangements has decided to use the Mayflower Hotel at the corner of Bay and Julia Streets as the headquarters for the annual meeting, April 30, May 1 and 2. This hotel has ample facilities to take care of a large attendance.

The roof garden will be used for the general assembly room and banquet and the large lobby on the first floor will be used for the registration desk and technical exhibits.

ALUMNI AND FRATERNITY GATHERINGS

Representatives of alumni and fraternity groups who contemplate get-together meetings at the State Convention in Jacksonville are requested to make their wishes known as soon as possible. Arrangements will be made for meeting places for all groups provided sufficient notice is given to the local Committee on Arrangements.

It is necessary to arrange group meetings so they will not conflict with the program of the State Association. Tuesday noon (May 1) has in the past been considered the ideal time. However, if this particular day is not convenient for any group, your Committee will arrange such meetings for Monday noon, April 30.

Your Committee also requests information as to the approximate number who will be expected

to attend each group meeting. Communications relative to Alumni and Fraternity Group meetings should be addressed to Dr. Charles B. Mabry, Jacksonville.

ANGLER'S COMMITTEE

Fishing trips for individuals or groups will be arranged during the annual meeting. Anyone desiring to arrive earlier than the convention date, or stay after the convention will find the Committee at his service. During the convention dates information concerning fishing trips may be secured at the registration desk. Those who wish to arrange trips in advance of the meeting are requested to communicate with Dr. A. H. Wilkinson, Jacksonville, chairman of the Anglers' Committee.

THE NEXT MEETING
OF THE
FLORIDA MEDICAL
ASSOCIATION
WILL BE HELD AT
JACKSONVILLE
APRIL 30, MAY 1 AND 2, 1934

TECHNICAL EXHIBITS

The management of the Technical Exhibits at the Jacksonville convention will again be in the hands of the business office of the state Association. For a number of years the exhibits have been handled by the Association and this arrangement has apparently worked out to the best interests of all concerned. Both exhibitors and the different entertaining societies have expressed themselves well pleased.

Exhibit spaces will be available in the lobby of the Hotel Mayflower. Our members are urged to visit the booth of every exhibitor. The doctor who keeps himself abreast with the times will find the exhibits both interesting and instructive.

Florida Medical Association, Inc.

JACKSONVILLE, FLORIDA
P. O. BOX 81

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SECRETARY-TREASURER AND
EDITOR OF THE JOURNAL

STEWART G. THOMPSON, D. P. H.
BUSINESS MANAGER AND
DIRECTOR OF EXHIBITS

Regulations Regarding Exhibits

Arrangement of Exhibits.—The management will provide skeleton booths as indicated in diagrams, also signs of uniform style. No interference with the light or space of other exhibitors will be allowed.

Exhibitor is responsible for damage to property. No signs or other articles shall be posted, nailed, or otherwise attached to any of the pillars, walls, doors, etc., in such manner as to deface or destroy the same. No attachments can be made to the floors by nails, screws, or any other devices that would in any way damage or mar them. All space leased subject to these restrictions.

Restrictions.—Exhibits should be confined, as far as practicable, to special articles, articles that are new, unique, or particularly attractive and scientific in character.

No proprietary drugs, chemicals, or therapeutic agents that do not comply with the rules of the Council on Pharmacy and Chemistry of the American Medical Association or which have not been accepted by the Council for inclusion in "New and Non-official Remedies", can be exhibited, distributed, or in any way advertised in the hotel. (For copy of official rules of the Council on Pharmacy and Chemistry, write A. M. A.)

No medical journal or publication can be exhibited that contains advertisements of drugs, chemicals, or any therapeutic agents which do not conform to the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

Irregular Canvassing and Distribution of Advertising Matter.—Solicitation of business or conferences in the interests of business except by exhibiting firms, is prohibited. Canvassing by exhibitors outside of their booths is also forbidden. Circulars or advertising matter of any description cannot be distributed, excepting from the Exhibitor's booth.

Exhibits of Electrical and Radiographic Apparatus.—Machines and apparatus operated by electricity must be shown as "still" exhibits. Practical demonstrations of X-ray apparatus and accessories or of any noisy apparatus of any kind will not be permitted. No objection will be made to the utilization of electricity for illuminating purposes or for operating smaller diagnostic instruments and electro-therapeutic apparatus which are noiseless.

Subletting of Space.—No subletting of space will be permitted. Each firm represented in the Technical Exhibit must sign the regular form "Application for Space in the Technical Exhibit." Any person or firm subletting space as well as the one purchasing space, will be subject to eviction. No refund will be made for space reserved.

Uncontrollable Eventualities.—The Florida Medical Association, Inc., will take all reasonable precautions against damage or loss by fire, water, storm, theft, strikes and other emergencies of that character, but does not guarantee or insure the Exhibitor against loss by reason thereof.

Cooperation of Exhibitor Requested.—The foregoing regulations with reference to exhibits have been formulated for the best interests of exhibitors and the hearty cooperation of our patrons is requested. All points not covered are subject to settlement by the management.

Space is leased with the understanding that the Exhibitor will hold the Florida Medical Association, Inc., harmless from any or all liability which results from any cause whatsoever within the control of said Exhibitor.

Application for SPACE in the Technical Exhibit at the Sixty-First Annual Meeting

of

Florida Medical Association, Inc.

HOTEL MAYFLOWER

JACKSONVILLE, FLORIDA

APRIL 30, MAY 1 AND 2, 1934

FLORIDA MEDICAL ASSOCIATION, Inc.

Box 81

Jacksonville, Florida

You are hereby authorized to reserve for our use space in the Technical Exhibit at the Hotel Mayflower for the Sixty-first Annual Meeting of the Florida Medical Association, Inc., April 30, May 1 and 2, 1934.

Our First Choice is Space No.....; at \$.....

Our Second Choice is Space No.....; at \$.....

Our Third Choice is Space No.....; at \$.....

Our Fourth Choice is Space No.....; at \$.....

Our Fifth Choice is Space No.....; at \$.....

(Make five selections. Space will be assigned in the order in which contracts are received.)

TERMS—Fifty per cent of contract price to accompany this order and the balance to be paid on or before April 10, 1933.

(Firm Name)

(Per)

(Address)

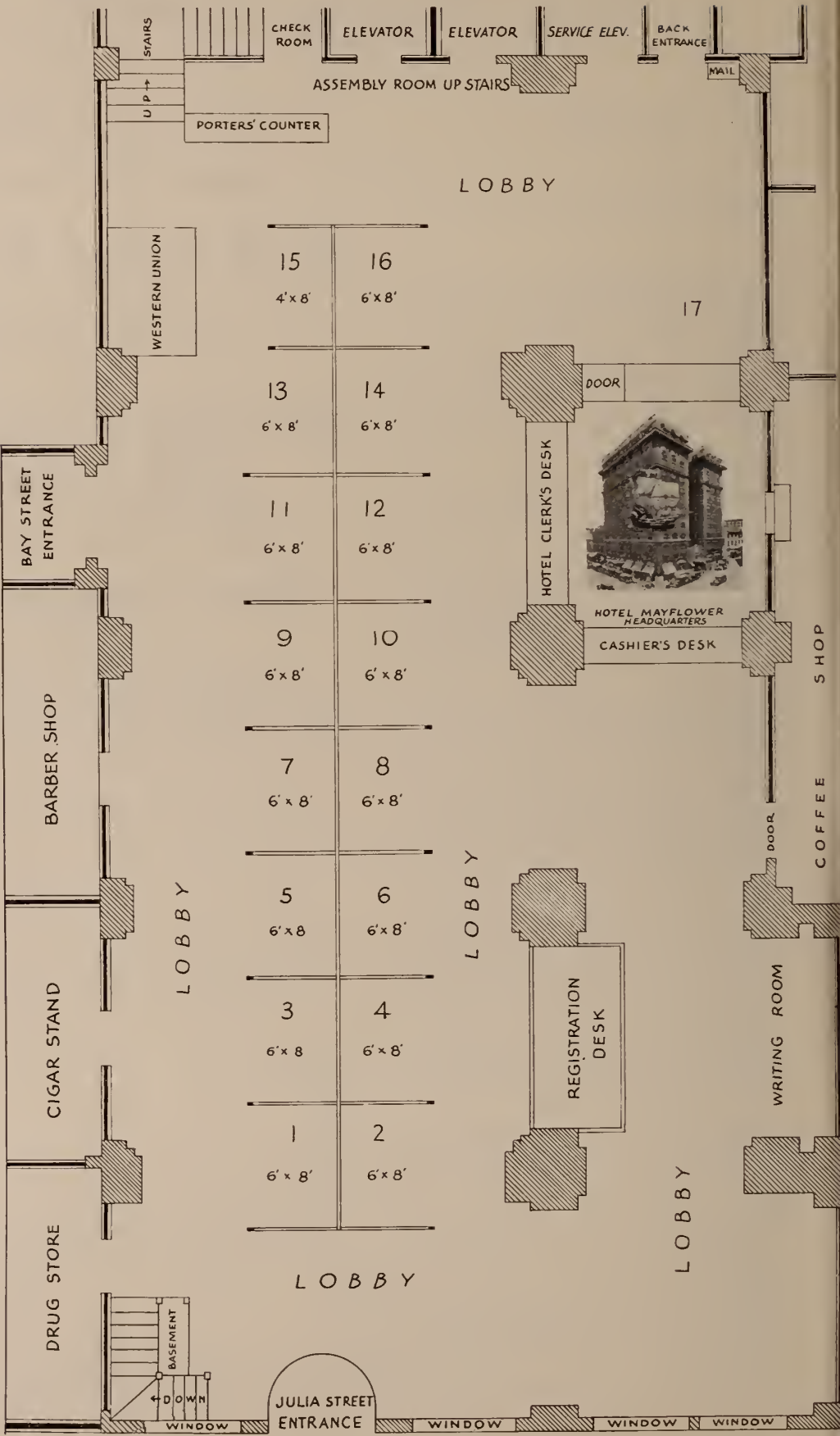
(Name of Person in Charge of Exhibit)

(Print here two-line copy for your identification sign.)

(Sign Painter's Copy)

SCHEDULE OF EXHIBIT SPACES AND PRICES
JACKSONVILLE, FLORIDA, 1934

SPACE	PRICE
1	\$50.00
2	\$60.00
3	\$45.00
4	\$60.00
5	\$35.00
6	\$60.00
7	\$35.00
8	\$50.00
9	\$35.00
10	\$50.00
11	\$35.00
12	\$50.00
13	\$35.00
14	\$50.00
15	\$45.00
16	
17	\$75.00



REPORTS OF DISTRICT COUNCILORS*

FIRST DISTRICT—W. C. PAYNE, M.D. *Pensacola*
Okaloosa, Walton, Santa Rosa, Escambia.

As Councilor for the First District of the Florida Medical Association, I submit the following report for the ensuing year:

My District comprises the counties of Escambia, Santa Rosa, Okaloosa and Walton. There are two medical societies in this District, the Walton-Okaloosa Medical Society and the Escambia County Medical Society which is open to membership to physicians in Santa Rosa County. There are seven members of the Walton-Okaloosa County Medical Society and all have paid their dues for 1933. One physician has recently moved from Mississippi into Okaloosa County. He is apparently desirable as a member and is being contacted. The Walton-Okaloosa Society is well organized and has regular meetings which are well attended. The Escambia County Medical Society has thirty-four members. All except three have paid their dues for 1933. Two of these are inactive. One of these has retired on account of ill health and is being proposed this year for an honorary membership. The other one has been out of the State for the last year, though it is believed that he will pay his dues when he can be contacted. All eligible men with one possible exception are members of this Society. We have monthly meetings well attended, with good programs. To sum up, I consider the condition of organized medicine in District No. 1 as most encouraging.

FOURTH DISTRICT—

LOUIE LIMBAUGH, M.D. *Jacksonville*
Nassau, Clay, Duval, St. Johns.

Duval and St. Johns Counties are very well organized, indeed. Duval County Medical Society had one hundred and thirty-five paid-up members in 1933 and nine members who were unable to meet their dues. St. Johns County had nine paid-up members with no member in arrears.

There are a goodly number of doctors holding licenses in Duval County who are not members of the local medical society. With one or two exceptions, wherein such doctors are not engaged in the active practice of medicine, these doctors are not eligible material for such membership. There are one or two doctors in St. Johns County who probably belong in the same category.

*Read before Pre-Convention Meeting, Jacksonville, January 21, 1934.

Neither Nassau nor Clay County has an organized society. There are not more than six or seven doctors in Nassau County and but three or four in Clay County. Attempts to interest these men in joining the Duval County Society have met with little success. It is not feasible for them to indulge in any of the activities of the Society and only the plea to have them in organized medicine can induce them to pay the dues. Nassau County has one physician who is a member of the Duval County Medical Society.

Duval County had one of its meetings this past fall devoted to a symposium on cancer. This symposium was well presented by good men and was both instructive and enjoyable. St. Johns County has not yet had a program on cancer control but is contemplating such. The Duval County Medical Society has been extremely active in its work on medical economics and deserves considerable credit as an organization. It is felt that the State Association should benefit by the untiring and zealous efforts of the individual members of the Economics Committee of that County Society during the past year.

The Councilor feels that this district is well organized and is whole-heartedly supporting the State Association and what it represents.

SIXTH DISTRICT—H. E. WINCHESTER, M.D., *Dunedin*
Pinellas.

The Sixth District is composed of Pinellas County only, whose society is well organized and functions smoothly. Frequent reports of our activities from our very able secretary have appeared in the columns of the Journal.

The membership roster contains 73 names. This does not include the members of the staff of the U. S. Veterans Hospital, who have been elected as "Guest Members." Forty-three members have paid dues for 1934, which is a greater proportion than usual at this time of year. Annual society dues have been reduced from \$5.00 to \$2.50. Four new members were received in 1933. A list of 26 non-members submitted by President Rowlett has been carefully checked. Six do not now reside in the county, two are applying for membership, six others are deemed worthy of membership but for various reasons have not joined.

A brief summary of the Society's activities for the year 1933 follows:

Eight meetings were held during the year. Two were business sessions only; two were preceded by supper. Five were held in St. Peters-

burg, two in Clearwater and one at the U. S. Veterans Hospital located between the two cities. At this session a bountiful supper was served in the Hospital dining room, after which, in lieu of formal papers, a most interesting and instructive group of clinical cases was presented by members of the hospital staff. Departing somewhat from the usual custom, men from other cities, prominent in their several special fields, were invited to present papers at the other scientific sessions. The average attendance of members was 40%.

The Physicians Business Bureau, organized by the society in 1932, has continued to give valuable service to members as a credit bureau.

A 15-minute radio talk, sponsored by the Society, has been broadcast each week by a society member over Stations WFLA or WSUN. These have been very well received by the listening public.

A list of St. Petersburg members has been carried as a paid advertisement in the newspapers during the winter months. A similar display advertisement is carried in the telephone directory.

Our society has heartily approved the report of the State Medical Economics Committee, and has an active committee endeavoring to carry out its provisions.

SEVENTH DISTRICT—

WALTER CLAYTON PAGE, M.D. Cocoa
Brevard, Volusia, Seminole.

The Seventh Councilor District is composed of the counties of Brevard, Volusia and Seminole.

The total number of white physicians in the district is 72, of which number 54, or 75 per cent, are members of the various county societies. Of the remaining 18 there are one or two that may not be eligible for membership.

There are eight colored physicians practicing in the Seventh District.

BREVARD COUNTY

The 1934 officers of Brevard County Society are Dr. Thos. C. Kenaston of Cocoa, president; Dr. J. D. Chunn of St. Cloud, vice-president, and Dr. I. K. Hicks, Melbourne, secretary-treasurer.

The number of physicians in this county are 13, of which 10 are members of the county society, leaving three non-members, of which one or more may not be eligible. There is one colored physician in this county.

The Brevard County Society is fully active. They meet the second Tuesday of each month, with a dinner and scientific program. An average of two papers or clinical cases are exhibited at each meeting. The average attendance is about 85%.

This county society publishes a directory of its members in each paper in the county once each month, furnishes speakers for civic organizations, and has initiated a mosquito control movement.

SEMINOLE COUNTY

The 1934 officers of the Seminole County Society are Dr. Arthur W. Knox, president; Dr. C. L. Park, vice-president; and Dr. John T. Denton, secretary-treasurer, all of Sanford.

Seminole County has a total of thirteen white physicians, of which eleven are members of the County Medical Society. I understand that there may be one that is not eligible for membership. This county also has two colored physicians.

The Seminole County Medical Society is alive and active. They have regular monthly meetings at which luncheon is served before the scientific program. Their reported attendance is over 90%. Their scientific program is usually composed of papers prepared by the members, though some clinical cases of interest have been shown. An interesting feature of their meetings is that they are held at the Sanford City Hospital.

The Seminole County Medical Society is planning to better their collections by having an attorney for the society make direct contact with the debtor after an account becomes 60 days past due. Also they plan to keep a check on floaters, who go from one doctor to another without paying.

In attendance at meetings and percentage of membership of doctors in the county, Seminole County Medical Society is the banner Society of the District.

VOLUSIA COUNTY

This year's officers of the Volusia County Medical Society are Dr. Roy Howe, Daytona Beach, president; Dr. George A. Davis, of DeLand, vice-president; and Dr. Joseph H. Rutter, of Daytona Beach, secretary-treasurer.

Volusia County Medical Society is the largest in the district. There are 46 physicians in the county, of which 33, or about 70%, are members of the county society. This leaves 13 non-members. This county also has five colored physicians.

This society meets monthly, except during the months of July, August and September, on the second Tuesday of each month. The average reported attendance at meetings is about 70%. The scientific program follows a luncheon, and usually consists of the presentation of papers and their discussion.

Under the auspices of this Society, Dr. Arthur J. Cramp, Director of the Bureau of Investigation of the American Medical Association, spoke at the Palmetto Club at Daytona Beach.

At this date the Volusia County Medical Society had not decided on any special activity for the year 1934.

In conclusion, I want to thank the Secretaries of all the societies for their courtesy to me and for their prompt attention to my requests. I have not been able to visit the Seminole and Volusia Societies as yet, but I shall attend one of their regular meetings as soon as convenient.

TENTH DISTRICT—

W. E. SHERMAN, M.D. *Winter Haven*
Polk.

The work of the councilor of the Tenth District has been principally to contact those men who are not members of the Polk County Medical Society, as Polk County has the only society in the Tenth District.

Much of the work has been done through friends of these non-members practicing in the community with them. Some of the physicians who were once members of the State Association are not now considered eligible by some of the members in their community. Others who have not paid their current dues have failed to do so, I am convinced, due to financial conditions.

It is believed that the reduction in annual dues will have a good effect upon getting these men reinstated.

It is not believed that there are more than ten men in Polk County who are eligible and who have not paid dues. There are some sixty-five men in the county.

Together with the officers of the Polk County Medical Society we expect to continue our efforts to make it as near 100% membership as possible.

ELEVENTH DISTRICT—JOHN E. HALL, M.D. . . . *Miami* Dade.

The councilor from the Eleventh District herewith submits the following report of the activities of the Dade County Medical Society during the year passed.

First and foremost, Dade County Medical Society is justly proud of its paid-up membership during the year of 1933, and it figuratively takes off its hat to its treasurer, Dr. H. A. Barge, and gives him full credit for having collected these dues. Dr. Barge was untiring in his efforts to collect, as we all have reason to know, and was as assiduous in chasing us for these dues as the proverbial greyhound is in chasing a rabbit.

Dr. Wm. W. McKibben deserves much credit for his activities in the mosquito control work in Dade County. He has devoted much time and attention to this work. Recently, Mr. Arthur Brisbane accompanied Dr. McKibben on a tour of inspection over the mosquito infested area, and he was so impressed with Dr. McKibben's work that he gave it world-wide notoriety in his "To-day." Dr. McKibben informs me that neither oiling nor drainage is the method by which they are eliminating the mosquito, but that they are employing one force of nature against the other, namely, the salt water minnow, technically known as the *Gambusia Affinis*. The Doctor tells me that this little fellow is destruction personified, as far as the mosquito is concerned.

Dade County Medical Society has been signally honored during the past year by having had quite a number of physicians of national note address it.

Dr. Gerard Raap, the president during 1933, is to be commended for his efforts to promote good fellowship among the members of the Society, and for having been able to instill greater interest in the monthly meetings, thereby increasing the attendance.

The Dade County Medical Society was host to the Florida East Coast Medical Association during October. This meeting was well attended by physicians throughout the State, and the scientific program was exceptionally good.

The officers for Dade County this year are: Dr. Roy J. Holmes, president; Dr. F. A. Vogt, vice-president; Dr. Robert T. Spicer, secretary; Dr. H. A. Barge, treasurer. With such officers to lead us, Dade should have one of the liveliest and best societies within the State.

TWELFTH DISTRICT—

H. QUILLIAN JONES, M.D. *Ft. Myers*
Glades, Charlotte, Hendry, Lee, Collier.

This district is composed of Glades, Charlotte, Hendry, Lee and Collier counties. No one of these counties is large enough to support a medical society except Lee. Here we have a small society

and have invited the doctors from neighboring counties to become members. So far none have availed themselves of the opportunity this year.

We hold meetings regularly each month, on the third Friday night. Scientific papers are presented and general discussion with case reports are encouraged.

THIRTEENTH DISTRICT—

GEORGE L. COOK, M.D.,.....Tampa
Hillsboro.

Seventy-six doctors holding Florida licenses and practicing in the Thirteenth District, are members in good standing of Hillsboro County Medical Society. Thirty-five doctors holding Florida licenses and practicing in Hillsboro County have been members of the Society but have been dropped because of nonpayment of dues. There are seven doctors holding Florida licenses and practicing in the county who are eligible for membership but are not members, and thirty-five hold Florida licenses and practice in the county who are not eligible for membership in the local society. This makes a total of 141 doctors holding Florida licenses and practicing in Hillsboro County under jurisdiction of the Thirteenth District.

The fact that there are thirty-five doctors who have been members of the Hillsboro Medical Society and are now in arrears, is a situation which can be explained only by the economic condition which has engulfed our country of late; as I do not think there has been sufficient strife within our society to cause this unhappy and unhealthy condition.

Up until a few years ago it was the policy of the society not to elect physicians to membership if it was known that they engaged in contract practice in whole or in part. Recently, it is believed, in fact known, the society has elected members—who are now in good standing—who occupy themselves in contract practice in part or in whole. Just to what extent this condition exists I am not definitely able to say.

In Hillsboro County, especially in Tampa, among the Latin element mostly segregated in Ybor City, there are any number of societies which solicit membership for a small weekly payment and by so doing have rendered unto them all medical services without additional charge; this includes hospitalization when necessary.

The physicians at the head of these societies and hospitals and those who care for the sick in

their homes, and for so doing receive certain specified salaries or derive income from their organizations, are classified as those doing contract practice, and as I have stated, up until recently were not eligible for membership in the local society.

Much thought has been given to this unhappy situation in our district, and recently our Economic Committee, together with the officers of the Hillsboro County Medical Society, met with Dr. R. G. Leland of the American Medical Association and explained to him our difficulty, with the hope that he, in conjunction with the National Organization, might offer some solution to the problem. Later Doctor Leland also met with the Society at a special called meeting.

At the present time the Society is trying to cooperate with the authorities of the Transient Camp which is being established in our midst, hoping to render them services from the Society as a whole, the proceeds from which will go into the treasury of the Society for expenditure in the advancement of scientific medicine in our district as well as within the State.

FOURTEENTH DISTRICT—

N. A. BALTZELL, M.D.,.....Marianna
Calhoun, Jackson, Gulf.

I herewith submit this, my report of the activities of the Fourteenth Councilor District of the Florida Medical Association for the year 1933.

This district, composed of the Counties of Jackson, Calhoun, and Gulf, has at least eighty per cent of its personnel located in Jackson County and due to the limited number of physicians located in the other two counties of the district, the Jackson County Medical Society attempted to enlist the entire medical fraternity of the district into its membership. The number of physicians in the Fourteenth District is twenty-three; eligible for membership, twenty. At present, ten members have paid their dues for 1934 with an indication on the part of five others of paying their dues in the very near future. The secretary of the society will make a supplementary report to that effect in a few days.

There has been in the past year a markedly increased interest and enthusiasm in organized medicine in this District, and regular monthly meetings have been held. The future seems much brighter for a continued interest in the Fourteenth District than for the past several years.

FIFTEENTH DISTRICT—

J. H. PITTMAN, M.D.....*West Palm Beach*
Palm Beach, Broward.

In rendering report to you relative to my activities as councilor for the Fifteenth District, including Palm Beach and Broward Counties, I beg to inform you that activities in Broward County have been stimulated by the meeting last year of the State Association. This Society's membership is seventeen; paid up membership seventeen and attendance seventy-five per cent. Broward County had twelve regular and seven special meetings and had a scientific program at eight of these meetings. Dr. O. C. Brown has been very active in his duties as secretary. There are a few eligible men in Broward County whom the society is trying to get in.

As for Palm Beach County, I beg to report that there has been very little activity to stimulate interest. We have had regular monthly meetings with only about fifty per cent paid-up membership and it seems impossible to get these men to pay their back dues. I am in hopes there can be some arrangement whereby an allowance or percentage off so that they can be reinstated. There was brought before our Society recently a suggestion that we cancel back dues so that we might reinstate our entire membership. We have very few eligibles for membership who seem to disregard the importance of associating themselves. Our attendance at regular monthly meetings has been about twenty-five per cent. I am very anxious that our president visit us and can stimulate our activities.

As to the campaign of cancer education I have been able to get one of our local papers to publish each week matter for the laity to read.

SIXTEENTH DISTRICT—

W. L. ASHTON, M.D.....*Umatilla*
Sumter, Lake.

The Sixteenth District, comprising Sumter and Lake Counties, is well organized. Sumter County Medical Society consists of all the eligible physicians actively engaged in practice in this County. The society meets regularly and takes an active interest in joint meetings at intervals with the Lake County and Central Florida Medical Societies.

Lake County Society continues to function in an aggressive manner. Its monthly meetings are well attended, with scientific papers by its own members and outside physicians a marked factor in keeping a good record of attendance.

This date marks the anniversary of a thirty-bed General Hospital, sponsored by the membership of the County Society which made available to Lake County its first hospital facilities. In excess of 500 patients have received treatment throughout the past year and the Society has been greatly benefited by its hospital project.

Two members were lost the society during the past year by reason of retirement from active practice, and the roster has been augmented by two members. The spirit of cooperation among the physicians in the district is all that could be desired, and much interest is manifest in State Association affairs.

The new officers of Lake County Society are: president, Dr. Will Wood, Mt. Dora; vice-president, Dr. R. H. Williams, Eustis; secretary, Dr. W. L. Ashton, Umatilla.

SEVENTEENTH DISTRICT—

JOHN ROCHER CHAPPELL, M.D.....*Orlando*
Osceola, Orange.

As councilor for the Seventeenth District of your Association, which comprises the counties of Osceola and Orange, of which the Orange County Medical Society is the only member, beg to submit the following report:

During the year 1933, we have had twelve regular meetings and three special meetings of the Orange County Medical Society. There were five papers presented by members of the society and two out-of-town speakers, to-wit: Dr. King of the United States Department of Entomology and Dr. H. Mason Smith of Tampa. We have had one motion picture program depicting the growth of tumors.

At the present time there are forty-six active paid-up members and two honorary members. During the year we gained four new members: Dr. Ruth Hart, Dr. Julian Buff, Dr. W. G. Miles and Dr. Grady Page. We lost one member by death, Dr. Cole Carroll of Apopka, and two by suspension, Dr. L. L. Andrews and Dr. L. M. Sutter of the Florida Sanitarium.

The average attendance at the meetings during the year was 70%. We have one member that should be mentioned particularly at this point who has not missed a meeting of the Orange County Medical Society in six years, except one time, and that was this year, and at that time he was in the hospital. That member is Dr. W. H. Spiers.

The Orange County Medical Society has been very active during the past year, particularly so

in publicizing organized medicine. We have taken advantage of every opportunity to give the public the benefit of medical knowledge. There have been thirty-seven radio talks given, one each week over radio station WDBO in Orlando. These talks were given by members of the Orange County Medical Society and everyone has contributed very generously of his time. These talks have been very interesting to the radio public, and we think have accomplished quite a little bit in enlightening the laity on various medical subjects. These radio talks will continue for an indefinite period, and we now have over fifty speakers scheduled for the coming year.

Under the direction of an able Publicity Committee, we have carried a series of ads in the daily newspapers of Orlando, listing the doctors who belong to the society. We feel this has been of great benefit to the doctors as well as the public, stressing the fact that only ethical men are eligible to membership.

On July 22, 1933, the Orange County Medical Society held its annual picnic at Lakeside Park. Besides the regular members of the society, we had forty out-of-town visitors at this picnic. Several committees of the State Medical Association held meetings. We feel that this mid-summer gathering enables the members of the Florida Medical Association to get together in an informal manner and discuss the various problems with which we are all confronted. It creates a spirit of better friendship and harmony in the State Medical Association. We hope to continue these picnics yearly.

During the year the Orange County Medical Society had quite a difficult time with the Florida Sanitarium of which Dr. L. L. Andrews and Dr. L. M. Sutter were the directors. Due to the unethical principles of the Sanitarium, which continued in spite of protests and warnings from the society, we were forced to suspend Dr. Andrews and Dr. Sutter from our organization. I am glad to report, however, that on request of the General Board of the Seventh Day Adventist Church, our Society met with them in conference. They asked us upon what grounds we would admit their medical officers back into our organization. We agreed to take them back provided the Board would remove Dr. Andrews as medical superintendent, and Mr. Rotmiller as business manager of the institution, and that they would discontinue their unethical policies to which we objected. This they have agreed to do. Mr.

Rotmiller has been removed and Dr. Andrews is awaiting his successor.

The Orange County Medical Society has formed a credit and collection bureau which has been incorporated under the laws of the State of Florida, and is now functioning under a business manager elected by the board of directors. He is paid a salary out of the funds of the bureau and has been successful in lining up a great number of delinquent accounts. This bureau, we feel, is going to be a great benefit to the members of the society, as well as being of benefit to the honest individual who is swamped with doctor bills. It also gives us direct information concerning the person who has no intention of paying his doctor bills.

There are a number of doctors residing in Orange County and Osceola County who are not members of the Medical Society. Of this number, only two are really eligible to belong to our organization, and I have talked to these personally during the past week. One of them has asked for an application blank and indicates his desire to return to the society. The other one has been noncommittal. We hope to have both of these men back in our organization before the annual meeting.

NINETEENTH DISTRICT—

HOWARD V. WEEMS, M.D. *Sebring*
De Soto, Hardee, Highlands.

We have a Tri-county Medical Society which meets monthly with dinner on the second Tuesday night of each month at 8 p. m.; the meeting place rotates between the various towns represented. During 1933 there were thirteen paid-up members. Four doctors who have been considered members and who have attended meetings but have not paid dues are: Dr. W. S. Pyatt, Bowling Green; Dr. H. P. Bevis, Arcadia; Dr. W. C. Touchton, Avon Park; Dr. E. C. Aurin, Ft. Ogden. These names were furnished to me by Dr. L. W. Martin, secretary of the Tri-county Medical Society.

Dr. B. E. Alsobrook, Hicoria; Dr. C. T. Dyess, Hicoria; Dr. J. M. Philpot, Bowling Green; Dr. C. C. Witt, Arcadia (suspended) are also in this district but are not considered desirable material.

TWENTY-FIRST DISTRICT—

L. L. WHIDDON, M.D. *Fort Pierce*
St. Lucie, Okeechobee, Indian River, Martin.

We have the Four-County Medical Society, which takes in St. Lucie, Martin, Indian River,

and Okeechobee Counties with a membership of twelve in good standing. They are:

L. L. Whiddon, president (Ft. Pierce).

J. D. Parker, secretary-treasurer (Stuart).

Ft. Pierce:

R. C. Boothe, H. D. Clark, M. D. Council,
C. H. Glidden, G. C. Hardie.

Stuart:

J. A. Newnham.

Okeechobee:

C. L. Davis, M. J. Lingo.

Vero Beach:

E. B. Hardee, G. L. Harrell.

There are two Chiropractors and one Osteopath who are licensed and practicing according to the laws of the State of Florida in the district.

There are no illegal practitioners in the district as far as we know.

There is one colored doctor (C. C. Benton) who is licensed and practicing according to the laws of the State of Florida.

STATE NEWS ITEMS

Dr. G. H. Edwards of Orlando was elected a member of the Board of Trustees of Rollins College at the annual meeting of Trustees held at Winter Park, February 23.

* * *

Dr. Oliver P. Broadbent of Jacksonville announces the removal of his offices from 1022 Park Street to Suite 454 St. James Building.

* * *

At a recent meeting of the Gulf Life Insurance Company, Dr. J. S. McEwan of Orlando was re-elected a Director.

* * *

Dr. George E. W. Hardy, Tampa, was elected president of the Atlantic Coast Line Surgeons' Association at its annual meeting held in Tampa, February 24.

* * *

Dr. Gerry R. Holden and Dr. Edward Jelks of Jacksonville were guest speakers at the January meeting of the Columbia County Medical Society and also at the February meeting of the St. Johns County Medical Society.

* * *

Dr. G. H. Edwards of Orlando was recently re-elected chairman of the Orlando Utilities Commission. This is his fourth term on the Commission.

Dr. T. W. Witt, Lake City, is spending some time in Hot Springs, Arkansas, recuperating from a severe illness.

COLE CARROLL

Dr. Cole Carroll, fifty, well-known physician of Apopka and one of the leading business men of west Orange County, died suddenly Friday morning, November 10th, at his apartment. Death was attributed to heart disease. He had been in poor health for some time and had complained Thursday of feeling ill, but his death was sudden and unexpected.

Dr. Carroll was well known throughout the country to citrus men. He was vice-president of the State Bank of Apopka and a director of the Plymouth Citrus Exchange, a large scale grove owner and had been a resident of Apopka for twenty-five years. He was an enthusiastic hunter and sportsman and owned a number of fine hunting dogs.

Dr. Carroll never married. He was born in Lamont, Florida, where most of his relatives now live.

CYRUS J. MARSHALL

Dr. Cyrus J. Marshall of Sanford died at his home February 19 at the age of 51, from the effects of a bullet wound. He had been in ill health for many months and had been confined to his bed since August.

Dr. Marshall was a native of Omaha, Nebraska. He was a graduate of the University of Nashville and the University of Tennessee. Dr. Marshall came to Florida in 1910 and settled at Oviedo. He moved to Sanford in 1918. From 1923 to 1926, he served as City Commissioner of Sanford. For the past twenty years he has specialized in x-ray and radium therapy.

Dr. Marshall was a member of Orlando County Medical Society, the Florida Medical Association and the American Medical Association. He is survived by his mother, Mrs. Olive A. Marshall, of Sanford, a son, C. J. Marshall, Jr., and a daughter, Eleanor Marshall, of Geneva, and five sisters, Mrs. R. W. Lawton of Sanford, Mrs. R. H. Ellis of Orlando, Mrs. R. O. Cornell of Washington, Mrs. L. E. Kirby of Philadelphia and Miss Gaylor Marshall of St. Petersburg.

At the regular meeting of the Halifax District Hospital Staff, held February 5th, the following Resolution was adopted:

Whereas, Dr. C. C. Bohannon having been Senior Surgeon on the Staff of the Halifax District Hospital since its inception and having served two terms as Chief of Staff, and having been instrumental through his untiring efforts in relieving suffering, and

Whereas, his interest in the promotion of the Halifax District Hospital will be continually missed,

BE IT RESOLVED, That we, the Medical Staff of the Halifax District Hospital, offer our profound sympathy and deep condolence to his bereaved family, and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to his wife and spread upon the minutes of the Staff and published in the State Medical Journal.

* * *

Dr. O. G. Kendrick of Tallahassee was elected chairman of the Florida Crippled Children's Commission at the annual meeting of that organization, held in Jacksonville in February. He succeeds Major Charles L. Snyder. Dr. Julius T. Westermann of Miami, a member of the Commission, will remain in charge of the East Coast district.

* * *

The many friends of Dr. E. W. Warren of Palatka will be gratified to know that he is rapidly convalescing after an illness of many months. Dr. Warren expects to resume his practice in Palatka very shortly.

* * *

The quarterly meeting of the Florida Society of Dermatology and Syphilology was held on the 25th of February at Miami.

Those attending were: J. J. Saxon and C. A. Andrews of Tampa; Alan Brown, J. Frank Wilson, and J. L. Kirby-Smith of Jacksonville; E. D. French, Rothwell Lefholz, Geo. N. MacDonell, A. B. Litterer and Wiley Sams of Miami.

It was decided at the meeting to have the next quarterly session in connection with the annual meeting of the Florida State Medical Association, April 30th, at Duval County Hospital at 9:30 A. M.

Dr. Alan Brown was designated Chairman for this meeting.

COMPONENT COUNTY SOCIETIES

COLUMBIA COUNTY MEDICAL SOCIETY

At the January meeting of the Columbia County Medical Society, held in Lake City, the scientific program consisted of a symposium on cancer. Drs. Gerry R. Holden and Edward Jelks of Jacksonville were guest speakers. Dr. Holden presented "Cancer, a Problem of Public Health"; Dr. Jelks spoke on "The Diagnosis of Cancer of the Intestinal Tract."

A representative group of laymen from the various civic clubs were present.

DADE COUNTY MEDICAL SOCIETY

At the March meeting of the Dade County Medical Society, the following scientific program was presented:

"Angina Pectoris Relieved by Total Thyroidectomy — Early Observations" — Arnold H. Kegal, Chicago.
 "Dermatology of the New-Born" — Elmo D. French, Miami.

At the business meeting of the Society held following its scientific program on February 2, it was proposed that the City of Miami apply for a \$90,000 federal loan for improvements and addition to the Jackson Memorial Hospital. A committee has been appointed to interview the city commissioners with a view to securing early action on this project.

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The following officers have been elected by the DeSoto-Hardee-Highlands County Medical Society to serve for the ensuing year:

President—G. F. Highsmith, Arcadia.

Vice-President—Howard V. Weems, Sebring.

Sec'y-Treas.—L. W. Martin, Sebring.

Board of Censors—G. F. Highsmith, Arcadia.
 C. H. Kirkpatrick, Arcadia, A. A. Poucher, Wauchula.

Delegate to State Meeting—J. A. Simmons, Arcadia.

Alternate—W. H. Peacock, Wauchula.

DUVAL COUNTY MEDICAL SOCIETY

At the meeting of the Duval County Medical Society held March 6 at the Hotel Mayflower, the following scientific program was presented:

SEVEN YEARS' USE

*has demonstrated the
value of*

THE SURGICAL SOLUTION of MERCUROCHROME, H. W. & D. in PREOPERATIVE SKIN DISINFECTION

This preparation contains 2% Mercurochrome in aqueous-alcohol-acetone solution and has the advantages that:

Application is not painful.

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SYMPOSIUM ON COLDS

"The Common Cold"—Horace R. Drew.

"Colds from Public Health Standpoint"—Henry Hanson.

"Chest Complications"—Louie Limbaugh.

"Ear, Eye, Nose and Throat Complications"—C. M. Sandusky.

Discussion opened by Stanley Erwin and Gordon Ira.

LEE COUNTY MEDICAL SOCIETY

The Lee County Medical Society met in regular session at the Lee Memorial Hospital, Friday, February 23. The scientific program was in charge of Dr. Ernest Bostelman of Ft. Myers who presented two clinical cases for study and discussion. This proved to be a very instructive and worth-while meeting.

PINELLAS COUNTY MEDICAL SOCIETY

The regular meeting of the Pinellas County Medical Society was held in the Power and Light Building, St. Petersburg, Friday, March 2, 1934, at 8 p. m. The following program was presented:

"Role of Sinusitis in the Production of Coughs"—Joseph Taylor, Tampa.

"Roentgenographic and Clinical Observations of Nasal Accessory Sinus Disease and Complications. Lantern Slides"—Bundy Allen, Tampa.

PUTNAM COUNTY MEDICAL SOCIETY

The following officers have been elected by the Putnam County Medical Society to serve for the year 1934:

President—A. E. Drexel, Palatka.

Sec'y-Treas.—E. W. Warren, Palatka.

ST. JOHNS COUNTY MEDICAL SOCIETY

A symposium on cancer was held by the St. Johns County Medical Society, February 19, at the home of Dr. Reddin Britt, St. Augustine. Guests of honor and principal speakers for the occasion were Drs. Gerry R. Holden, Edward Jelks and W. A. Claxton of Jacksonville.

Following the scientific session, Mrs. Britt served a delicious supper.

WALTON-OKALOOSA COUNTY MEDICAL SOCIETY

THE WALTON-OKALOOSA COUNTY MEDICAL SOCIETY IS THE SECOND SOCIETY TO REPORT 100% OF MEMBERSHIP DUES PAID FOR 1934. THIS SOCIETY CAN BE DEPENDENT ON EACH YEAR TO "GO OVER THE TOP" DURING THE MONTH OF FEBRUARY.

The following officers were recently elected for 1934 by the Walton-Okaloosa County Medical Society:

President—E. P. Webb, Crestview.

Vice-Pres.—J. C. McSween, DeFuniak Springs.

Sec'y-Treas.—A. G. Williams, Lakewood.

Delegate to State Meeting—J. C. McSween, DeFuniak Springs.

Alternate—A. G. Williams, Lakewood.

This society has recently become incorporated.

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AUXILIARY NEWS

Mrs. James Blake, President, requests that an announcement be made of the annual meeting of the American Medical Auxiliary to be held in Cleveland, Ohio, June 11 to 14, with the Carter Hotel as headquarters—two blocks away from Hotel Statler, which is to be headquarters for the American Medical Association.

Mrs. Blake says: "We are looking to each and every state group to get their membership and their dues up to date by the end of the fiscal year. Paid-up memberships will play a great part in our Cleveland meeting."

Mrs. Blake sends the following very timely advice:

"There are many federal plans in the air these days, and every state and county auxiliary should keep in close touch with their medical society, and seek their advice, and take heed. Study what these plans are, as presented by Dr. Elliot, or some other member of Miss Frances Perkins' committee, and then thoroughly understand the position of the medical society to which you are an auxiliary on this plan. Now as never before our associations outside our homes will help us to help our public relations work in growing apace. Each state must meet the problem before it in a sane and helpful way.

"Let me commend to your thoughtful consideration the various reports concerning medical care which we hear so much about. Let me urge you to be alert and watchful during these days of tremendous changes in the social and economic order. Above all, let me stress the superlative importance of loyalty for your medical society,

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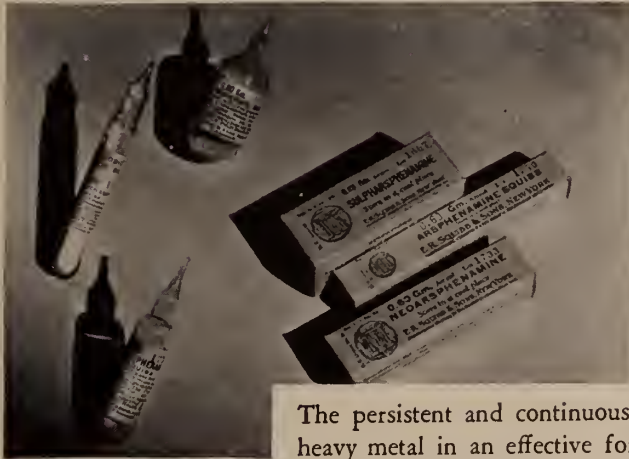
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"I have said many times that an Auxiliary member must be a woman who can take and grow and give, a woman who can sense her responsibility to a group and also to each individual in it. The ideal Auxiliary member must at times be a sponge interested only in absorbing. Again she must be a brilliant prism, receiving benefits from others and reflecting them back. She must have an intelligent vision of the true scope of our work, must have convictions and still be able to look at a question with cool consideration and courage to stand for those convictions. Unblinded by her enthusiasms, she must learn to look at a question from all sides with generosity and that kindness of judgment which makes her quick to praise and slow to question the motives of others."

* * *

Since there is a scarcity of news from the Auxiliaries in our own state as this article goes to press, we would have you gain inspiration from the semi-annual report made by our sister State Auxiliary of Georgia, and we commend them for their energy and their live organization.

The state has 30 Auxiliaries and four memberships at large representing 42 counties. The program for the state group, as it has been outlined by its advisory committee and the president of their State Medical Association, deals with Mother Welfare. This is being presented in all districts in the state and the Auxiliary has been responsible for programs in 66 counties. The program was approved as a part of the cooperative health work of the Georgia Congress of Parents and Teachers, the Georgia Federation of Women's Clubs, the Georgia Federation of Business and Professional Women, the State League of Women Voters, the Director of Parental Education of the University of Georgia, the Public Health Nurses, the Red Cross, and others. A. M. A. study envelopes were used through the efforts of the Auxiliary.



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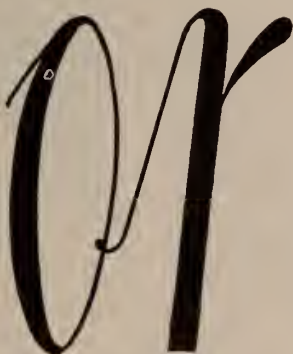
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them are advertised and used as complete foods without the addition of milk to the formula. Thus there is a lack of fat, protein and vitamins." (Scobey, Ralph R.: Arch. Pediat., Vol. XLVII, No. 6, June, 1930.)

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ADVERTISERS' NOTES

BULLETIN No. 95.

A review of Physician's Bulletin No. 95, published bi-monthly by Eli Lilly and Company, Indianapolis, Indiana, discloses considerable information that will doubtless cause it to be read with interest by physicians. Among other features appear a dissertation on bronchial lavage with reference to Merthiolate as a bronchial disinfectant; an article on the hypoglycemic action of fat; a discussion of the reduction of reactions from lumbar puncture; and reports on the injection treatment of varicose veins, and factors influencing the mortality from rabies.

In addition to these feature articles emanating from the Lilly medical and research departments, Bulletin No. 95 contains several abstracts of current interest. While it is understood that this publication is circulated to the entire medical profession, in event any physician does not receive his copy, Eli Lilly and Company will be pleased indeed to forward one upon receipt of request. The bulletin should be in the hands of all physicians not later than March 16th.

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(To be continued)

THE NEXT MEETING OF THE
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OPENS AT 1:30 P.M., APRIL 30,

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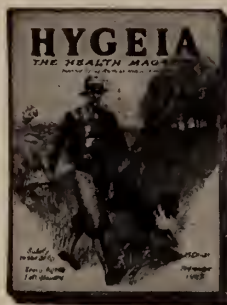
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SCHEDULE OF MEETINGS—COMPONENT SOCIETIES FLORIDA MEDICAL ASSOCIATION

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon ?	
Alachua	Harry M. Merchant, M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	
Bay	Allen H. Miller, M.D., Millville.					29%
Brevard	I. K. Hicks, M.D., Melbourne.	2nd Tuesday		Varies	Yes.	
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	24%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		86%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.	2nd Tuesday	8:00 P.M.	Varies	Yes.	
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	29%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	54%
Hillsboro	John S. Helms, Jr., M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	67%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	59%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	100%
Leon-Gadsden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	71%
Madison	Geo. O. Davis, M.D., Madison.					
Manatee	W. D. Sugg, M.D., Bradenton.	3rd Tuesday	7:00 P.M.	Whitfield Country Club Bradenton	Yes.	
Marion	Richard C. Cumming, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	73%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	John A. Pines, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	52%
Palm Beach	R. Henry Baldwin, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	46%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	67%
Pinellas	O. O. Feaster, M.D., St. Petersburg.	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	74%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	
St. Johns	Reddin Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	90%
St. Lucie-Okeech- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	
Seminole	J. T. Denton, M.D., Sanford.	2nd Monday	7:00 P.M.	City Hospital Sanford	Yes.	100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	
Taylor	C. A. O'Quinn, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	16%
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Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 10

Jacksonville, Florida, April, 1934

Yearly Subscription, \$3.00
Single Copy, 30c

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American Medical Association, Cleveland, June 11-15, 1934.

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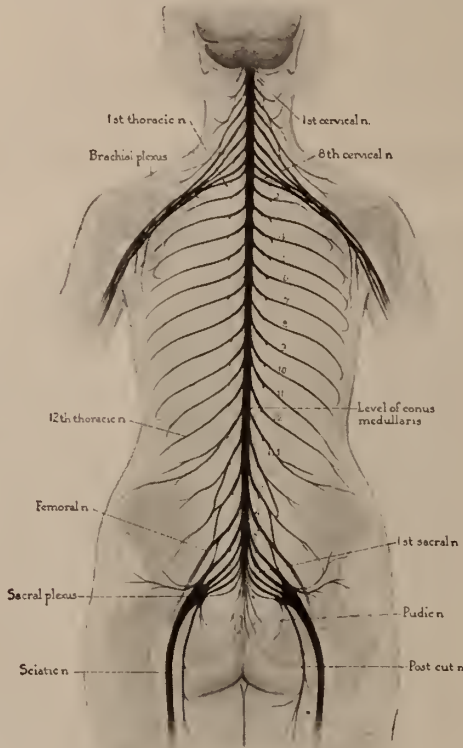
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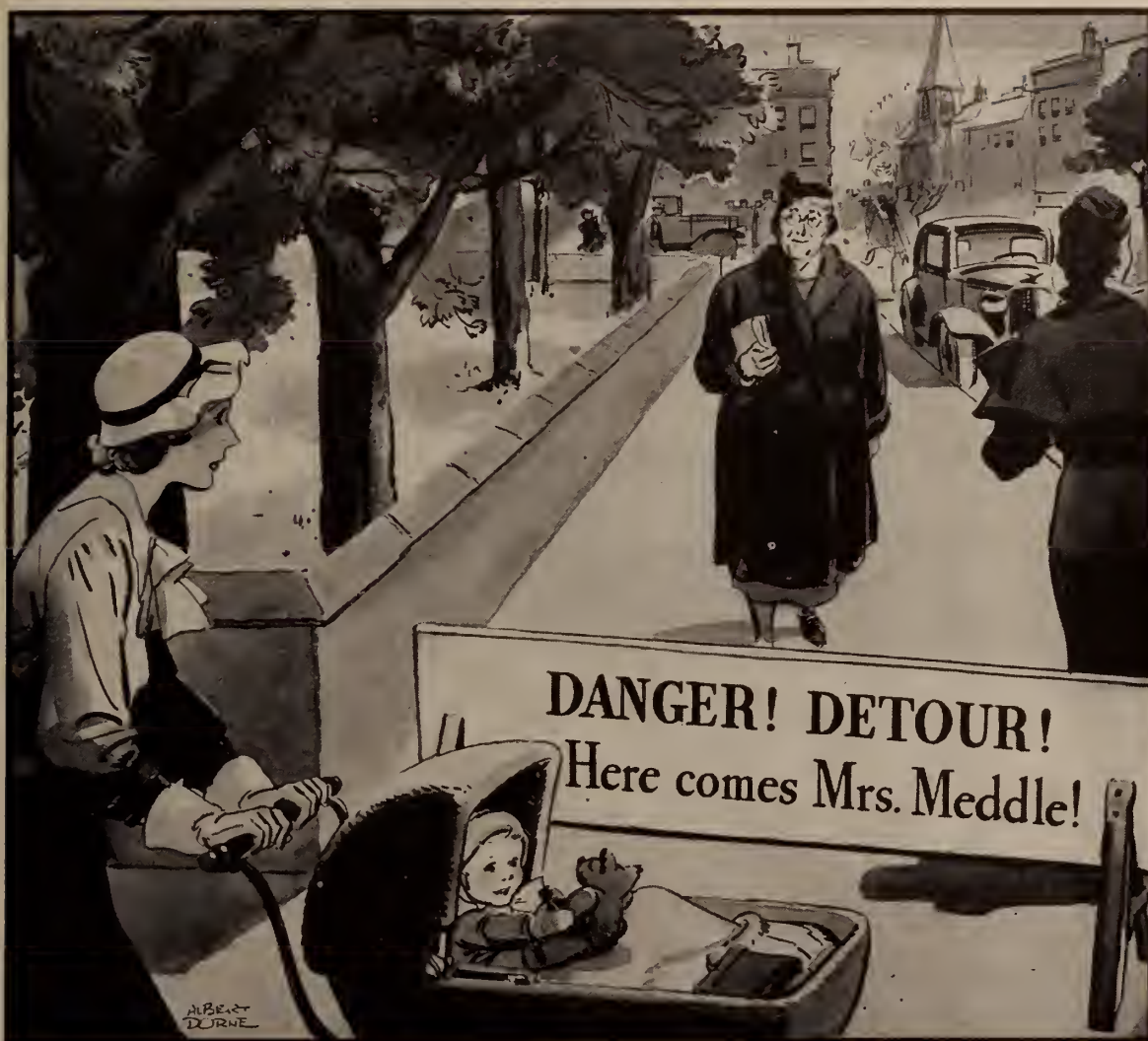
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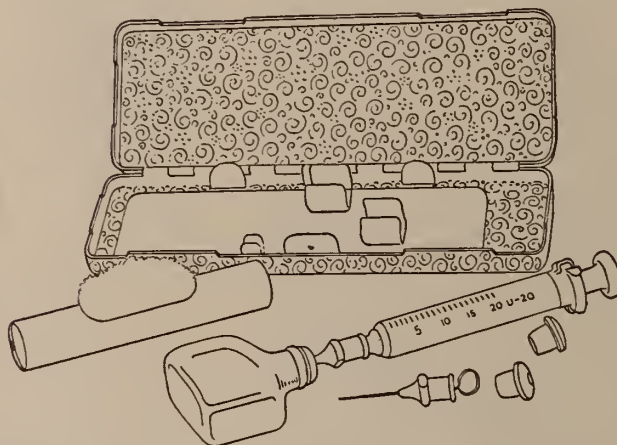
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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, April, 1934

Number 10

HYPOTHYROIDISM IN THE ADOLESCENT GIRL, WITH PARTICULAR REFERENCE TO SOCIAL DELINQUENTS*

T. Z. CASON, M.D.,
Jacksonville.

In a paper previously read before this Association, the subject of which was "Hypothyroidism: Low Respiratory Metabolic Rate—a Preliminary Report,"¹ I attempted a clinical classification of cases and described the technique employed in doing the basal metabolic test, also the precautions used to insure accurate findings. The present paper sets forth the results of further observations together with comments on particularly interesting phases of what I have interpreted to be the result of abnormally low secretion of the thyroid gland. The technique in doing a basal metabolism on the low metabolic group requires even greater care than is necessary for the placid hypothyroid. The result of the first tests is quite apt to be misleading. It may not be amiss to say here that largely because of the numerous types of apparatus and their widespread use, all too frequently findings are in error because of a break in technique. The precautions described in the preceding paper have been observed with the utmost precision in the present series of 22 cases.

Medical literature contains little on the subject of hypothyroidism and much less on the condition as found in the adolescent girl. Tilt² in a series of studies entitled "The Basal Metabolism in Young College Women in Florida," after an examination of 52 subjects, ranging in age from 17 to 25, concluded that the average metabolic rate was -10.6%, according to the Aub-Du Bois standard. No clinical classification was made to determine the percentage having symptoms of hypothyroidism. The accuracy of her work is not to be questioned but my observation does not indicate that her conclusions would apply to the population as a whole. The question of climate and metabolism has by no means been settled. A much larger and more diverse sampling with clinical checks will be necessary before definite

conclusions can be drawn or the present standard changed.

Hayward and Woods,³ writing on "Mental Derangements in Hypothyroidism: Their Misleading Effects in Diagnosis," say: "Insufficiency of thyroid secretion sometimes shows its most striking effects through malfunctioning of the brain cells. The patient may become depressed and apprehensive, thought may become slow and bodily movements retarded. The condition is easily mistaken for a depressed psychosis. Or there may be irritability and excitement leading to the diagnosis of mania." Their paper deals with adults who are beyond middle life. The clinical picture they present is analogous to that of the cases here presented, indicating the similar effect produced on the brain cells by a lack of thyroxin in the tissues.

Baskett⁴ made a study of 113 young women students of Stephens College in Missouri, whose ages were between 16 and 20. His subjects were selected because of one or more definite clinical symptoms indicating that they were hypothyroid cases. Of the number tested 70.8% were from -11% to -40%, while in a group of 28 obtained by sampling from the student body only 50% were -11% to -40%. In his discussion he says: "In the light of fairly recent findings our old conception of hypothyroidism, which was practically synonymous with myxedema, must be abandoned." He says further: "We must abandon our conception, which the textbooks give us, that the hypothyroid patient is a sluggish, sallow, puffy-faced person with slow speech and sluggish movements." With both of these statements I heartily agree. He feels that failure to recognize the condition and consequent lack of treatment or failure to treat the recognized condition may cause the lowering of mental ability.

Hensel⁵ observes, first, that "hypothyroid symptoms may occur at any time in life but are particularly common at certain ages and under certain conditions, namely, at puberty, at the menopause, during and following pregnancy, in the convalescent period following infectious diseases (notably influenza), and occasionally following extensive thyroidectomy for large degen-

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

erating adenomatous goiters" and, second, that 24 of his 56 cases reported "were of the lean slender type definitely below normal in weight." This latter finding coincides with my observation over a period of ten years. The only constant symptom that Hensel⁵ noted was a "lowered metabolic rate."

Crile and Associates⁶ in a recent book on "Diagnosis and Treatment of Diseases of the Thyroid Gland," state that hypothyroidism may be the cause of behavior problems in children and mention startling results following the administration of small doses of thyroid extract, although to the entire subject of hypothyroidism they give but little space.

A study of the histology of the normal gland indicates that it is probably not called upon to meet sudden demands as is the case with other secretory glands about which we have greater knowledge. This difference is particularly evident in the epithelial cells, which are relatively dormant. The failure to respond promptly to additional requirements in early adolescence may partially explain the low metabolic rate in the cases which follow. Plummer⁷ says: "The essential known function of the thyroid is the elaboration and delivery to the blood of a secretion containing the active agent, thyroxin." The normal thyroxin content of the blood is 14 mg. A variation of 1 mg. from normal will produce a variation of 2.8% in the basal metabolic rate. Plummer⁷ states also that 0.75 mg. of thyroxin given intravenously daily will maintain the normal rate of a thyroidless individual. Hence it is apparent that a slight variation from the normal in thyroxin secretion will produce pronounced changes in the basal metabolic rate. Close observation and careful checking of the individual are therefore absolutely necessary. The indiscriminate administration of thyroxin or thyroid extract without the safeguard of properly controlled basal metabolic tests is inexcusable.

Four years ago the first of a series of cases that seemed to correlate hypothyroidism and social delinquency came to my attention. Since that time the number of cases has increased sufficiently to warrant a study. The first case of this series was that of a young girl, L. M. R., 14 years of age. She was a ward of a volunteer institution committed to the care of children and was referred to me because of an enlarged thyroid gland and because a physician had told her she had a goiter. The taking of her history

revealed that she was a definite behavior problem. She was 5 feet 5½ inches in height, weighed 112½ pounds and presented none of the characteristics usually attributed to hypothyroid children. She did, however, have a distinctly palpable thyroid. Her basal metabolic rate was -19%. She was extremely irritable, had a violent temper and occasionally flew into a passion, threatening her own life and the lives of those in the home in which she had been placed. She was slightly above the normal mental standard. She has now been under my observation for four years. Her last basal metabolic rate test, done December 21, 1932, was -7%.

It soon became evident that when a normal metabolic rate was established she ceased to be a behavior problem. She was given 3 grains of Armour's thyroid extract (the product used in this entire series), which proved to be too large a dose. This was reduced and after some months during which metabolic checks were made the required dose was established. The administration of too much thyroid produced an effect almost identical with that of the original hypothyroid state. This girl is now developing into a fine type of young woman and is doing excellent work at school. She presents an extreme example and the favorable outcome of her case is attributable to a patient, well trained social worker, an understanding foster-mother and the establishment of a normal basal metabolic rate. It was this case which led me to make tests and observe other cases.

The second case, M. B., age 15, a definite behavior problem in another city, came under my observation because of the behavior difficulty. Her basal metabolic rate was also -19%. Her age-weight-height relationship was normal. Placed on 3 grains of thyroid extract daily, she quickly returned to normal and ceased absolutely to be a problem case. She was the only one of this entire series of girls presenting behavior problems who had the general appearance of the marked hypothyroid. She was well advanced mentally and returned to normal with less trouble than the others.

The next case, E. S., age 13, basal metabolic rate -20%, brought to Jacksonville because of the behavior problem she presented, came under my observation for the same reason. She was given 1½ grains of thyroid extract daily. When she returned in two months, her basal metabolic

rate was -16%. The dosage was increased to 2 grains, which was sufficient to establish a normal metabolic rate. She has ceased to be a behavior problem and is exerting a good influence over her associates.

The fourth case, H. M. A., age 16, height 5½ feet, weight 184 pounds, basal metabolic rate -12%, came under my observation February 27, 1932. Taken from an institution, she had been legally adopted but because of her abnormal behavior and the inability of the foster parents to control her, she had been returned. She was overweight and required considerable care. Despite an intelligence quotient only slightly below the accepted normal, she was a poor student and would not apply herself. She was placed on a proper caloric diet and given 2 grains of thyroid extract daily. In April, 1932, her basal metabolic rate was -21%. She was then given 3 grains of thyroid extract, the dose on which she has continued. On December 29, 1932, her basal metabolic rate was -6% and her weight 150 pounds. Although this girl has reduced 34 pounds in weight and is now on a normal metabolic balance, she continues to present a serious problem from a behavior standpoint. Lack of application persists and she is not always truthful. This case of hypothyroidism with its accompanying difficulties evidently shows also the effect of early environmental influence. Had she been returned to the institution four years earlier or had proper treatment been instituted in either place, it is probable that the result would have been more satisfactory.

In addition to the foregoing cases, which are typical examples of the type I am trying to present, I wish to bring to your attention a case with a definitely low basal metabolic rate which shows no abnormal social behavior. K. D., age 15, height 5 feet 5 inches, weight 116 pounds, basal metabolic rate -19%, was sent in for allergic tests because of eczema, all of which were negative. She was placed on 3 grains of thyroid extract daily. The skin lesion disappeared.

The next case is presented to show the diversity of the problem and to emphasize the necessity of a basal metabolism test before conclusions are drawn. M. C., age 19, height 5 feet 5½ inches, weight 115 pounds, had been examined by a psychiatrist in Philadelphia two years before coming to me, at which time a metabolism was done and found to be -5%. The examination in October, 1932, gave the same rate. Her

intelligence quotient was estimated at -80 and she had every evidence of being a hypothyroid case in both her facial expression and her physical actions. She is a definite social problem, although no misconduct has been observed. She is developing under the care of a social worker especially trained in handling this type of individual.

DISCUSSION

That the low metabolic rate patient is a definite problem has only recently been recognized. This is particularly true of the young girl who develops the condition at puberty. That social delinquency in the adolescent girl was associated with this type of patient had not occurred to me until the first case reported in this paper came under my observation and continued to be studied over a period of four years. Early success in its treatment led me to investigate the basal metabolic rate of all social delinquents who have since come under my care. These cases in most instances showed a low basal metabolism and it became evident that a normal metabolic balance aided in establishing normal behavior. It is not to be inferred from this paper that I believe that all adolescents who are social delinquents necessarily have a low metabolic rate. Neither is it to be inferred that all adolescent girls with a low metabolic rate are necessarily social delinquents. However, sufficient numbers of this type have come under my observation to convince me that physicians, both in private and in institutional practice, should see to it that every adolescent child—particularly the young girl—who is a definite social problem from a behavior standpoint, be given a basal metabolism test, done under conditions beyond questioning as to accuracy.

Unfortunately, I have not had enough experience with boys who present behavior problems to draw conclusions, but it is here suggested that the physician who has the opportunity to study them in sufficient numbers might come upon some interesting findings and render valuable service by doing so.

In connection with this series it is interesting to note that not in a single case was sex delinquency a factor. From the literature on the subject one might say that the absence of this factor was to be expected. However, it has been my observation that low metabolic rate is not necessarily associated with hyposexuality. Except in

cases of myxedema and near myxedema, there has been little or no relation. Despite the literature, I have not found low basal metabolic rate individuals necessarily undersexed in any respect. Certain of these cases undoubtedly are, but only in those patients giving a chain of symptoms indicating general lassitude.

While no recognized genetic influence figures as a known etiological factor in hypothyroidism of the type here presented, yet in two cases—sisters—not reported herein, the clinical symptoms and the low metabolic rate began at approximately the same age. The mother, aware of the symptoms manifested by the first daughter and of her subsequent improvement on thyroid, recognized promptly the early appearance of the same condition in the second daughter three years later.

The relation between thyroid balance and the action of the brain cells is well established. Too frequently, however, the effect of the imbalance due to hyposecretion is not recognized until the myxedematous state is approached; consequently, we have too long and too intimately associated hypothyroidism with those symptoms which are characteristic of the myxedema patient. Also, as Baskett⁴ has observed, a delay in treating the adolescent girl may result in permanent mental impairment. This is a possible explanation in two of my cases.

Too much value has been placed on inheritance as a cause of social delinquency in the adolescent. It is admitted that preadolescent environment is a potent influence in subsequent behavior; yet this admission should not preclude a careful study by the trained psychiatrist and the physician to determine the question of physical variance. A carefully taken history and a basal metabolic test should be important features of this study.

While all of the low basal metabolic rate adolescent girls are certainly not behavior problems in the sense of being delinquents, nevertheless most of them require special care to avoid some form of abnormal behavior. I believe with Richards⁸ that we need centers where the social worker, the psychologist and the educator, working with the physician who is interested and trained in the work of social rehabilitation, can cooperate to prevent delinquency and to bring about needed adjustments which will prepare those individuals who present behavior problems to meet life in a normal manner.

Every physician today should be alive to such opportunities as come his way to serve society by reclaiming delinquents. There are no textbooks as yet for guides, but the scientific experiments now being made and the monographs which are beginning to appear are the foundation on which the medico-social literature and practice of the future will be built. This pioneer field invites the attention of every forward-looking medical man.

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DISCUSSION

Dr. M. Jay Flipse, Miami:

I wish to congratulate Dr. Cason for his paper on "Hypothyroidism." He has brought attention to something that may be of real value in correcting some of the social problems of so-called mental defectives.

Carrying on this work, he is showing interest in some of the same material that has attracted my interest for a number of years. It was in 1927 or in 1928, I think, that I presented a paper before this body on the subject of "Asthenia in Southern Florida." I pointed out that this group of asthenics was suffering in a large percentage of cases from hypothyroidism.

Since my previous report, my associates and I have continued our observation, not limiting our studies to children as Dr. Cason has done in this paper, but including individuals of all ages. Our sex incidence remains essentially unchanged with about five women for each man in the series showing hypothyroidism symptoms.

We have tried to study the chemical angles to

obtain a knowledge of any chemical deficiency which might exist and have encountered certain findings which might offer some explanation for the mental symptoms reported by Dr. Cason. May I call your attention to an article in the January issue of *The Journal of Internal Medicine* in which the author, discussing thyrotoxicosis, shows a low blood serum cholesterol value in this disease and suggests that the blood cholesterol values bear a definite relationship to the basal metabolism. I think this author would have presented his case more strikingly if he had studied the free cholesterol and the combined cholesterol instead of the total cholesterol. According to our studies, the free and combined cholesterol values in the red blood cells are definitely related to thyroid function. The most spectacular alteration of cholesterol values occurs in cases of myxedema when thyroid substance is administered. Even before the basal metabolism shows much change there is a marked shift in the cholesterol values in the red blood cells in these cases.

Calcium metabolism, I think, is closely bound up with cholesterol metabolism. Hypothyroid cases as a rule show relatively high total blood serum calcium. If these diffusible and non-diffusible calcium values are obtained we find a shift in the calcium values toward a low diffusible calcium. A variation in this utilizable form of calcium will cause an increase in the cells all over the body, the cells of the central nervous system being especially sensitive. Such increased permeability of the brain cells might readily cause an alteration in the psychic behavior of the individual.

Additional studies on hypothyroid disease are unquestionably required before this hypothesis can be accepted, but I am mentioning these points in the hope that Dr. Cason may be able to add at a later date, some further data in his group of adolescent girls and may perhaps explain the intricate mechanism which appears to function in the change in personality he has reported in his interesting paper.

Dr. W. C. Blake, Tampa:

Dr. Cason has presented some very interesting observations,—behavior problems caused by insufficient thyroid secretion and the reestablishment of normal behavior by correcting this deficiency. The bringing of psychiatric problems

under physical control has few examples but offers very interesting possibilities.

Everyone who has had experience in the study of metabolism knows that there are a great many people presenting a subnormal metabolic rate. Many of them have no symptoms directly referable to their metabolism while on the other hand many others present a very definite train of symptoms which are easily amenable to thyroid medication. Every text-book on the thyroid gland contains many chapters on the physiology and symptomology of hyperthyroidism and a fair amount of space devoted to myxedema but very little is said about the mild hypothyroid state. We know, however, that the symptoms referable to this condition are frequently very varied and at times bizarre.

I can remember a remark made by Dr. Barker, a number of years ago: "Never marry a thyreopath for your days will be filled with dismay and your nights with despair." While his remark had special reference at the time to the hyperthyroid state yet it is definitely true that a metabolic deficit is frequently accompanied by nervousness and irritability just as at other times there is fatigability and lethargy. Far too general is the impression that thyroid deficiency should be suspected only when the symptoms approach those of advanced myxedema. These patients frequently have great difficulty in adjusting themselves to their environment. Particularly is this true at the time of puberty and in women at the menopause, periods when instability is most marked.

It is rather difficult to explain opposite types of reaction in a given degree of metabolic deficit except on the basis of polyglandular imbalance. Dr. Flipse has mentioned the fact that calcium metabolism is often disturbed. I believe this is probably due to an associated deficiency of the parathyroid glands which could also account for the symptoms of nervousness and irritability. In polyglandular syndromes usually one gland dominates the picture and appropriate therapy directed at this gland may be sufficient to allow the reestablishment of balance. To illustrate this point, we know that bilateral oophorectomy is frequently followed by a metabolic reading of about minus 20 and this can usually be raised to normal by appropriate amounts of ovarian extract. Definite evaluation of many endocrine disturbances must await methods of quantitative analysis of the secretions elaborated.

Dr. Cason's paper illustrates the need of a careful metabolic study of the various groups of mental defectives and those cases presenting behavior complexes. I believe it can be stated without fear of contradiction that our mental and so-called functional cases receive less general medical investigation than any other group of patients. The pursuance of this study will probably lead to much interesting and extremely valuable information. I feel that Dr. Cason's paper is a valuable contribution not only for the information it contains but because it points the way in an almost untrodden field of endeavor.

Dr. H. Mason Smith, Tampa:

I think the paper presented by Dr. Cason is very timely, and presents for discussion at this time a problem which has confronted probably every practitioner.

I have, in my work with the Juvenile Court of Tampa, found more pre-adolescent delinquency from calcium deficiency than probably any other metabolic defect. As Dr. Cason has shown, calcium deficiency may bring about a tremendous irritability. A boy who was brought to me, once in a state of passion, threw his little sister out of the window. It is my opinion with adolescent girls and boys that calcium deficiency is found hand in hand with hypothyroidism. The calcium tests usually made by the laboratories in estimating the amount in the blood have been of guidance only so far as advanced cases are concerned. In the beginning of calcium deficiency we do not get very much change in the calcium content of the blood, because at that time they are drawing calcium out of their own bones. The administration of calcium in these cases brings about an improvement both in the clinical symptoms—which is one of vagotonia and general circulatory asthenia—as well as behavioristic disturbance.

There is no doubt in my mind that the administration of calcium in these cases which Dr. Cason described has brought about an improvement, but in my personal experience there has been a more rapid improvement when we give the thyroid and calcium together.

THE NEXT MEETING OF THE
FLORIDA MEDICAL ASSOCIATION
TO BE HELD AT JACKSONVILLE
OPENS AT 1:30 P.M., APRIL 30,
CLOSES AT NOON, MAY 2.

A STATE HEALTH DEPARTMENT'S SERVICE TO THE MEDICAL PROFESSION*

HENRY HANSON, M.D.,
State Health Officer,
Jacksonville.

I have always felt that the State Board of Health of Florida has rendered a service which is beneficial both to the medical profession and the general public. When I first came to the state in 1909 the State Board of Health did some things which it is not doing now, e. g., the examination of pathological tissues. The object of tissue examination was to gather data as to incidence of cancer or other malignant growths. This phase of the work was dropped in 1916 when a change in laboratory administration occurred and the new laboratory director was not a pathologist.

Most of the physicians who returned from army service during the war had acquired new ideas regarding the importance of public health, especially the prevention of typhoid through the means of sanitation and anti-typhoid inoculations. Simultaneously, there came the Schick test and the toxin antitoxin for the control and prevention of diphtheria. Previous to this there had been very little progress in diphtheria control; the yearly incidence continued about the same. If a case occurred in a family there was no means by which one could determine how many were susceptible or how many new cases there might be in the family. Disinfection and fumigation were thought necessary and often practiced with practically no effect on the number of secondary cases. Many doctors gave varying doses of antitoxin to those exposed as a preventive, a practice which has since been discarded because of the danger of sensitizing the patient, and the temporary nature of the protection which it offered.

In spite of all that has been done the diphtheria rate is still higher than it should be. In the first place this is due to the fact that the people do not bring children with sore throat to the doctor in time. Secondly it is due to delay in diagnosis and thirdly to delay in the administration of an adequate dose of diphtheria antitoxin. Before the discovery of antitoxin the fatality rate in diphtheria was 50% of those attacked, a rate which dropped in 1904 to about

*Read before the Sixtieth Annual Meeting of the Florida Medical Association, Hollywood, May 2-4, 1933.

8%. In 1923 the case rate per 100,000 population in this state was 8, and in 1931 4.9, with a decidedly higher rate among the white than among the colored children, (for the white 9 and for the colored 4.4 in 1923, and 5.7 white and 2.9 colored in 1931).

Another matter which received special attention from the army doctor was the venereal disease prevalence. On the basis of local surveys the following has been quoted from the last report of the State Board of Health: "The annual new case rate over the nation is 3.46 per 1000 population for syphilis and 5.71 for gonorrhea. There are 643,000 cases of syphilis constantly under treatment and 474,000 cases of gonorrhea. (Estimates in 1930.)" The venereal diseases present the greatest of the health problems. In this field the private practitioner and the specialist can do more for the relief of suffering humanity than any other group, it may be the only means for control. The nature of the disease and its acquisition is such that it is only in the doctor's private office that anything like the truth will be known.

In thinking of the aid which a health department can offer the doctor the following came to mind:

1. Laboratory. Routine and research.
2. Investigation of disease of unknown etiology.
3. Library. Making available reference material.
 - a. Research in progress of medicine as revealed in medical and other scientific literature.

LABORATORY, ROUTINE AND RESEARCH

When a physician thinks of the service a health department may render it is usually as an aid to diagnosis or in confirmation thereof. The first constructive public health measures were instituted to lower the incidence of communicable disease and consisted in putting into practical use the new knowledge gained by research into the etiology of pathology.

Although there has been a definite system of medicine since 4500 B. C., more than 6400 years, *it is only within the last 60 years that we have known of the bacterial causes of disease!* When Anton Van Leeuwenhoek, (1675 A. D.) announced that he had seen small animalcules through his microscope no one attributed any great significance to the announcement. Another

hundred years elapsed before the medical profession began to suspect any connection between the microscopic "animals" and disease, and another hundred before any work was done to prove the relationship. It was not until after the researches of Pasteur (1856-1870) that bacteria had been shown to have a definite relationship to disease. The study of morbid anatomy began in 1750, (75 years after Van Leeuwenhoek first saw bacteria) and a considerable knowledge of pathology was acquired before the medical profession had any conception as to its etiology.

The chief help of a modern public health laboratory to the practicing physician lies in the examination of materials or specimens collected from his patients, for the determination of such conditions as diphtheria, tuberculosis, typhoid, gonorrhea, syphilis, meningitis, malaria or intestinal parasites, etc. So far there are no practical laboratory tests for measles, scarlet fever or whooping cough.

Among some of the rare diseases which have been found in recent years we have typhus fever, tularemia, leprosy and ratbite fever, and it is expected that before long there will be proven cases of the Eastern variety or Rocky Mountain Spotted fever, for all of which there are definite laboratory tests. Leprosy is appearing with a disquieting frequency. Up to date we have had 55 cases of leprosy at the U. S. P. H. S. Hospital at Carville. There are 30 cases there now. Eighty per cent of these have developed their leprosy in Florida.

At the present time the State Board of Health has two advanced research divisions for the study of malaria. The one at Tallahassee is bringing out many new facts regarding the incubation and character of the clinical course, and the effect malaria has on certain central nervous system diseases. There have been some very striking examples of its effect on general paresis of the insane, on early tabes dorsalis, but most striking of all on a few individuals regarded as pre-paretics. Extensive and elaborate studies are in progress of the cycle of the parasite in the mosquito as well as in the human being. All mosquitoes used in the work are reared in especially constructed insectaria. New data are collected and correlated for publication in the leading scientific journals of the country.

In the division of malaria control studies we are corroborating the knowledge of the preva-

lence of the disease by means of blood smears taken of school children in the counties showing the highest recorded death rate from the disease. The figures are now available on the results of blood smears from about 8,000 school children in seven counties. They appear to substantiate the mortality statistics. While the highest average for a county is 9.5% of 655 children examined some schools in the same county showed as high as 41.7% positive. In another county with an average of 9.4% positive, among 2,249 examined, there were a few startling examples of high incidence as follows: 38%, 44%, 51%, 78%, and 84%. These facts are the results of combinations of field and laboratory studies. In the course of such work the technicians often find opportunities for improving the technique involved in the work.

INVESTIGATION OF DISEASES OF UNKNOWN ETIOLOGY

There are not many such diseases in Florida. One often meets conditions in the tropics which seem to be such. It often happens that patients are seen in which fever and other indeterminate symptoms of an inconclusive nature are met with which, both for the benefit of the patient and the physician's ability to alleviate such sickness in the future, should have a thorough investigation. It must be borne in mind, however, that the physician who is doing field work in the tropics, has to rely almost entirely on observation of symptoms, and can not depend on helps of a well equipped laboratory for both essentials and frills to elucidate the nature of the illness.

The family physician is the first as well as the most effective health officer. It is he who has the first contact with the family, and he is the first to be asked about measures for the safeguarding of the health of the family. It is he who should see to it that the babies are given toxin antitoxin or toxoid at 6 to 9 months of age (some say it were better to wait until the 9th month) and then vaccinate for smallpox. It seems that there is less danger of a post vaccinal encephalitis if the child has previously had toxin antitoxin or toxoid, and since the consequences in a case of encephalitis are so grave and far-reaching it is preferable to follow the procedure indicated.

During good times the general practitioner was not concerned about a class of work which quite generally was assigned to the Medical

Health Officer, such as Schick testing, the giving of toxin antitoxin, typhoid vaccine and smallpox vaccinations. The period of good times alluded to was taken advantage of by a certain group of politicians to secure the enactment of laws for the care of World War and all other veterans. No restrictions such as definite service connected disability were specified with the result that the Federal expense grew very rapidly and at the same time the legitimate field of the private practitioner was limited by the infringements of persons without service connected disability who demanded free care.

In Florida the immunization "clinics" have been considered proper fields for the District Health Officers, until last year when objections were raised by a few physicians. Since then we have been seeking a common meeting point where the Health Officer may stop and the general practitioner shall begin or vice versa. I want, however, to call the attention of the Association to the fact that the State Board of Health nurses have never done any inoculations, or acted in the capacity of a medical Health Officer. There are several sections in the state where part time health officers have authorized the local nurses to do inoculations, which is a greater infringement on the prerogatives of the doctor than the work done by the medical Health Officer. It has been my observation that the so-called clinics for immunizing purposes alluded to brings work to the private physician rather than taking it away from him. Many of the immunization "clinics" are held at the request of some local practitioner who has discovered one or more cases of diphtheria or typhoid fever.

The work which should be left with the health officer is Schick testing, smallpox vaccination, and tuberculin testing. When the results of the tests are read the reactors can then be referred to the family doctor for treatment, or some other plan such as has been agreed upon between the Health Officer and the local medical society.

The practice of midwifery is a phase of a problem where the Health Department can be of service to the medical profession. Before the enactment of the law (by the Legislature of 1931) there was no legal control of any person choosing to be a midwife. At one time there were 17 men (not physicians) serving as midwives in the state and more than 1,400 female midwives, most of them ignorant and totally unqualified for this important work. There were weak points in the law, such as duplication

of licenses and absence of a penalty clause for those choosing to practice without first securing a license. Dr. Chowning has introduced a substitute bill which will remedy the defects mentioned. Even under the old law we were able to reduce the unfit by about 33%. It is hoped that the amended law will help in reducing the unfavorable puerperal death rate in Florida. The deaths in Florida from this cause in 1931 were 9.9 per 1,000 live births, the fourth highest rate in the United States. About one-third of all babies born in this state occur in the practice of midwives.

There is no desire on the part of the State Board of Health to infringe on the practice of the private physician. If the physicians will do the necessary immunization the medical staff of the department will have more time to devote to important phases of epidemiology and sanitation. There are many such problems, e. g., malaria, hookworm disease, tuberculosis, leprosy, etc. The leprosy situation in the state is much more serious than the average man thinks. Its epidemiology should have careful study and the proven cases should be promptly isolated, which is the most effective control measure known at the present time.

From the standpoint of the state it is more costly to cure than to prevent, which is also true for the individual affected.

One might say that one of the leading functions of a State Health Department is to procure information which the practitioner does not have the time or facilities to gather, and then in consultation and cooperation with the private practitioner put it into effect.

DISCUSSION

Dr. Leland F. Carlton, Tampa:

I think I have a real good alibi in discussing this paper of Dr. Hanson's in the fact that I did not have the privilege of seeing it before it was read. However, there are so many things of vital importance to us in the State Board of Health work that I think sometimes it is almost unnecessary to know what the other man is going to say.

As you all realize, the State Board of Health is the last, and I consider the most important, offspring of our Florida Medical Association, and I believe it behooves each and every one of us to get behind the State Board of Health, pushing and pulling. In that way we can get ahead of the legislature and see if we can't accomplish

more for the indigent of our state. We will then also accomplish a great amount for those who are able to pay.

The infection rate of certain diseases in our state is absolutely too high, higher than any other state in the Union. I mention especially such diseases as hookworm and malaria. Through the generosity of the Rockefeller Institute we are now taking advantage of some experimental study of these diseases which is going to result in the next few years in great good to our school children. It is going to lower the rate of our school expense. It is going to lower the number of repeaters, and it is going to help our children as they grow up by making them better individuals and citizens of this country.

I believe we should all use the laboratories, use them more. Our laboratories are located in areas for the purpose of doing the most good to the practicing physician, and in helping the practicing physician these laboratories are helping the public in general and vice versa. My whole request to you today would be to get in accord with the State Board of Health and stay in accord with it, get better relationship between the local societies, the practicing physicians and the State Board of Health. The sole aim of the State Board of Health is to help the public through the recommendations of our State Association and our local societies through them. As you notice only one or two have taken any active part in this work, the others sit back and look on.

The State Board of Health is the greatest assurance we have today. As individual practitioners we are looking for our gains as well as most of the public. The State Board of Health is looking for general good through public health improvements. Let's get back of it and do all we can.

Dr. M. J. Flipse, Miami:

I wish to thank Dr. Hanson for presenting this subject here today. He has given us some facts on the malaria situation that I for one did not know.

These statistics that he quoted in regard to instances of malaria are so totally strange to us in the southeastern section of the state, that if we counted up the cases of malaria in this locality we probably would have fingers and toes left over—having used these members for our tally points.

I would like to congratulate Dr. Hanson on bringing out the point that the State Board of Health and the general practitioner should co-

operate in the program which the State Board of Health has advocated.

We are fortunate in Florida in having as State Health Officer a man who is also a doctor, and in the second place a man of Dr. Hanson's type. His modesty probably prevented him from calling attention to the fact that many of these things which have been mentioned including the war on malaria, the United States Public Health Service and contributions which the Rockefeller Institute is making to work out this problem, are practically all outgrowths of his own efforts. And it is through his own efforts that we have not only the good which he is now doing, but the good which will continue long after all of us are gone and remain as monuments to him and to his work.

In some places the Board of Health just does not have the interest in the general practitioner and in the private physician that our public health officer has. Those of you who have followed the bulletins issued by the State Board of Health periodically know there are many things that Dr. Hanson did not touch upon and which the State Board of Health is doing. If one-half of the population knew how much need there was of public health work there would probably not be the struggle that there is at the present time to obtain a budget that is anywhere near adequate in handling these projects.

ELLIOTT TREATMENT OF PELVIC INFLAMMATIONS*

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Jacksonville.

Introduction.

Acute infections of the female genital organs and their sequellae, pain, backache, menstrual irregularities, chronic exhaustion and sterility, cause an extremely high percentage of chronic invalidism among women. It is well recognized that operative intervention by the abdominal route is generally contraindicated when the infection is active. The trend toward palliative measures, such as hospitalization, modified Fowler's position, bowel hygiene, sedatives, ice bags to lower part of the abdomen, protein therapy or diathermy is greater today among general practitioners and gynecologists than ever before.

Any new method of treating inflammations of the pelvis which has been tested and shown to be of distinct advantage in reducing the period

of disability and the number of cases in which operation would be required should be tried.

Heat for Inflammation of the Pelvis.

Heat, perhaps was one of the earliest therapeutic measures ever employed and has been used for centuries as a factor in the treating of conservative measures of pelvic inflammatory diseases. Heat causes pus and exudates to be absorbed by increasing the blood and lymph circulation and causing a leukocytosis. It has been known for some time that accessible body cavities lined with mucous membranes could stand temperatures higher than the external could bear. Hot prolonged douches as described by Gellhorn gave good results in pelvic inflammatory diseases, many cases being cured without operation. However, this method of applying heat to the pelvis has been practically discarded because patients were unable to administer it to themselves for lack of equipment or because it was too much trouble.

Other methods have been developed which made it possible to apply heat of a constant temperature in the vagina for a fixed period. The degrees of heat could be automatically varied according to the tolerance of the patient or the severity of the inflammatory disease. The first of these methods was diathermy, used at one time by gynecologists everywhere, and beneficial results obtained were unquestioned. It would have been used more extensively by the general practitioner but it required considerable costly apparatus and much experience with and knowledge of diathermic current. Also, the temperature produced from the electrode in the vagina due to the rugae or folds would be quite unevenly distributed and burns of the vaginal mucous membrane have been reported.

A distinct advance over the preceding method has been achieved by Dr. Charles Robert Elliott which is believed to be the best method of the application of heat to date. He devised a distensible rubber bag that can be inserted into the vagina around the cervix through which a current of hot water maintained at a constant temperature is circulated by a small electro-motor while the water pressure delivered by a pump distends the bag in the vagina and the heat is distributed equally in all directions. The temperature of the water and the pressure in the bag may be absolutely controlled for any length of time. The temperature of the water is regulated by a thermostat and investigation so far

*Read and method demonstrated at Duval County Hospital Staff Meeting, Jacksonville, February 20, 1934.

reveals that the temperature should not exceed 130° F. The average time for a treatment is one hour, which varies depending on the patient's tolerance to heat. Holden has shown that a temperature of 130° F. in the vagina for one hour will produce a temperature of 106° F. in the pelvic peritoneal cavity and rectum and a temperature of 104° F. in the bladder. The rise in mouth temperature after one hour's treatment varies from no rise to 4/10 of a degree rise. Speculum examination after a treatment shows that the hyperemia caused a marked increase in the cervix and vaginal secretions. After two treatments the cervix is softened and actually becomes shorter and broader, thereby causing a widening and shortening of the cervical glands. In a pelvic inflammatory case mobility of the uterus increases with continued treatment, tenderness decreases and the uterus and adnexa can be more easily outlined due to absorption of the exudate. White blood counts taken immediately before and after the treatment in 236 instances showed a leukocytic increase of 17%.

Indications for Elliott Treatment.

Holden and Gurnee (of Bellevue Hospital where Dr. Charles R. Elliott perfected this treatment) reported 500 cases in which the Elliott treatment was used in all types of pelvic pathology, acute and chronic, with excellent results. They first used the treatment in cases of cellulitis—the so-called frozen pelvis—as a preoperative preparatory measure and found in a great number of cases after some treatments the lesions disappeared and operation was not necessary. They tried it in pelvic abscesses before fluctuation thinking it would hasten the formation of pus and it was found that resolution took place instead in a large percentage of the patients. As they became more familiar with the action of this type of heat they did not hesitate to treat acute salpingitis with or without pelvic peritonitis. Their studies would indicate that all types of pelvic inflammations of infections respond equally well.

Graham, Jacobs, Vaughan and Gellhorn reported similar good results particularly in gonorrheal salpingitis and postpartum and postabortal pelvic infections.

Holden and Sovak reported that they found the Elliott method to be beneficial as a preoperative and as a postoperative measure in the reconstruction of bilateral occluded oviducts following pelvic infections. Treatments before operation

reduced the magnitude of the operation and made the tissues more nearly normal in appearance. Some fallopian tubes that did not remain patent after operation, as shown by the Rubin test, would frequently become patent following the use of the Elliott treatment, as a result of the rapid absorption of the exudate and increased vascularity of the tissues.

Counseller reported the use of Elliott method of treatment for inflammatory diseases of the pelvis at the Mayo Clinic and it has there been used in almost all types of pelvic infections. He divided his cases in two groups: one in which the Elliott treatments only were used; the other wherein the treatment was surgical, due to the fact that in addition to pelvic infection ovarian, dermoid or uterine tumors were present. The operations were followed in from five to seven days by the Elliott method of treatment which stimulated rapid absorption of the exudate, shortened the convalescence, reduced the morbidity and therefore contributed much to a successful surgical result. In that series he stated satisfactory results were obtained in 100% of the cases.

This treatment is an excellent treatment for gonorrhea in the female because a temperature lethal to the gonococci can be easily maintained for an indefinite period of time, thereby clearing up the latent foci of infection which heretofore were so difficult to reach. The time required to affect a cure is shortened and the treatment itself is not uncomfortable to the patient.

Conclusions.

Dr. George Gellhorn stated: "This will help to cure a large number of pelvic inflammations, painlessly, without mutilation, without danger, in a short time, at a very moderate expense—without the protracted convalescence or the aftermath that will follow so many cases that have been operated on for inflammatory conditions."

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THE ROLE OF MEDICINE IN AVIATION

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Jacksonville.

At a time of nation-wide interest in matters pertaining to flying, one is reminded of the recently developed specialty of aviation medicine, and of the problems involved in determining one's physical fitness for flying. Under such circumstances, the medical examiner must be possessed of reasonable diagnostic ability in several of the highly specialized fields of medicine.

In the beginning of flying activities in this country, the only ones, broadly speaking, who had an opportunity of insight were those engaged in military flying. Therefore, opportunity for gaining knowledge of flying was extremely limited and procurable from the small group of civilian flyers who were themselves even in the amateur phases of training.

As late as 1916, and in fact in the early part of 1917, the flying activities of the U. S. Army were a procedure confined to the Aviation Section of the Signal Corps. The Surgeon General of the Army, realizing that there must be some peculiar medical problems involved, initiated studies from which there developed the School of Aviation Medicine of the U. S. Army. The School of Aviation Medicine, the first of its kind in the world, was located at Mitchell Field, Long Island. There a small group of officers of the Army were detailed for instruction. The courtesies of the school were extended to a limited number of medical officers of the Navy. Later certain officers of the Reserve Corps and a few medical officers of the National Guard were accepted as students at this school. After an intensive course of instruction for a period of six weeks, the successful student medical officers were qualified as aviation examiners. After a total of three months of instruction, student medical officers were qualified and rated as flight surgeons. These officers who were of the regular establishment were assigned to duty as flight surgeons with flying units of the Army and Navy. In the meanwhile flying cadets were being trained at Brooks Field, Texas. Because of the fact that more than half of the cadets were classified as unfit for flying after preliminary instruction, and because of the further fact that a large percentage of those who were given more advanced training were likewise disqualified, it was decided to move the School of Aviation Medicine to Brooks Field, Texas. It was hoped

that a medical laboratory, at the point of the activities incident to training flying cadets, would discover correctable measures which would reduce the number or percentage of rejections.

Approximately six years ago Congress enacted the Air Commerce Act. This law gave authority to the Aviation Secretary of the Department of Commerce to regulate and control civilian flying activities in this country. Dr. Louis Bauer, former Major Medical Corps, U. S. Army (and one of the country's pioneer flight surgeons) was appointed Medical Director. Dr. Bauer developed a standard of medical requirements for flying which was adopted. It was necessary to designate many examiners over the United States for the examination of civilian pilots of all types. Wherever there was a doctor who was a qualified flight surgeon, said physician was authorized to conduct the complete examination. Where qualified flight surgeons from civil life were not available, the appointment of two doctors consisting of an eye, ear, nose and throat specialist and an internist, were authorized to jointly conduct the necessary examinations. In the beginning there was practically no waivers for physical defects. As time has passed, and as knowledge of flying has been gained, and as safer equipment has been developed along with the facilities of more frequent landing fields, beacons, radio communication and navigation facilities generally, it has been found possible to liberalize in the matter of medical requirements. Under existing regulations, those who commercially indulge in flying are restricted to persons who are practically free from physical defect. It has been the policy of the Aeronautics Branch of the Department of Commerce to maintain a very high standard of physical requirements for commercial flyers. On the other hand with increased safety of flying, it is the policy to liberalize very greatly in the cases of student pilots, amateur pilots and private pilots, all of whom fly for pleasure and not for the purpose of transporting persons for hire or reward. It is desired to qualify any person for flying activities, unless he shall be demonstrated to have physical defects which would manifestly jeopardize his life were he to attempt to pilot aircraft.

In none of the fields of flying is it exacted that the pilot shall in any sense be a super-man. One should be in good general health. He should be especially examined for a history of sleeping sickness, double vision and for former illness

within any of the rheumatic groups. There should be a most careful examination of the heart. A history of syphilis will disqualify unless there is definite serological evidence of cure. A history of bronchial asthma within five years will probably disqualify. In general, the history of other diseases will lead to a careful examination to determine whether or not said diseases have left any permanent defect that might be disqualifying.

Imperfect ossification of the cranial bones, the persistence of the anterior fontanelle, depressed fractures, loss of bony substance of the skull should be viewed as probably a disqualifying defect unless the examiner is certain the defect is slight and will cause no future trouble. If there are deformities of the skull, attention should be paid to the presence or absence of evidence of disease of the brain or spinal cord.

Thyroid disease associated with toxic symptoms should disqualify. Marked curvatures, deformity or abscesses of the spinal column are disqualifying defects.

The applicant for flying should necessarily have a normally formed chest and be free from pulmonary diseases such as tuberculosis, asthma, emphysema, cysts, abscesses or tumors of the lungs.

Examination of the heart and blood vessels should reveal an absence of diseased processes. Murmurs, unless indicating organic diseases, may be disregarded as disqualifying factors. All applicants are subjected to tests which reveal the cardiovascular responses to exercises. As is well known, one normally has an increase in pulse rate and blood pressure reading after exercise. A heart muscle may be said to be efficient, if the pulse rate taken two minutes after exercise approximates the initial rate. The standard method of exercising an applicant is to have him step five times upon a chair eighteen and a half inches high in exactly fifteen seconds, keeping one foot on the chair throughout.

All applicants should be free from serious diseases of the abdomen, including the gastrointestinal system.

The genito-urinary system should reveal no evidence of serious disease upon examination, and necessarily there should be a freedom from serious urinary abnormalities, such as albumen, casts and sugar. Albumen without casts, in an otherwise healthy individual, is not necessarily disqualifying.

The extremities should be normal and care should be taken to determine that the applicant has no defect, deformity or limitation of function which would render it impossible for him to properly operate the controls of an airplane.

The examination of the visual apparatus is one of the serious elements of an aviation examination. One who desires to fly commercially must have normal visual acuity. He must have normal depth perception, which is determined from the average of five readings taken with the Howard Dolman depth perception apparatus. This test is made at a distance of 20 feet from the fixed rod. No information concerning the results of the successive trials should be given the examinee until the test is completed. In the case of student pilots or others of the private flying grades, it is possible to qualify one for flying who has normal depth perception with correcting lenses. These non-commercial aviators are required to have 20/50 vision or better in each eye without lenses, or 20/30 or better in each eye with glasses. An applicant may thus be qualified for flying with the restriction that correcting lenses be worn at all times while operating aircraft. It is said that among the veteran pilots of this kind, only six have been permitted to qualify in the transport grade with the loss of one eye.

All applicants are subjected to ocular muscle balance tests. The red glass diplopia test is used and if diplopia develops, the applicant is disqualified for any class of flying, except that he will not be disqualified if diplopia develops only at the extreme limits of the fields of vision. Tests for hyperphoria are applied by the use of the Maddox rod placed in front of the right eye. The spot light is placed twenty feet distant from the applicant. If a hyperphoria of more than one diopter is developed, the applicant should be disqualified.

Duction tests are conducted by the use of prisms of increasing strength being placed before the eye until the applicant is no longer able to fuse and he sees two lights. The abduction or prism divergence, and the adduction or prism convergence are separately tested. An adduction of eight diopters or more, providing there is an abduction of not less than three diopters, is satisfactory. An abduction of three diopters is required. More than three diopters may be accepted providing the amount of adduction is increased in proportion.

The duction test requirements, if found not within normal limits, in the case of a pilot in the

non-commercial grade, will probably not disqualify.

The power of accommodation is determined by having the applicant read Jager test type No. 1 or 2 at a distance of not more than thirteen inches. The visual fields are examined for every grade by the finger and fixation methods. In behalf of scientific thoroughness, should any abnormalities be thus developed, the use of the perimeter should be resorted to. The eyes should be inspected by bright light, and if any pathological condition (which may become worse or interfere with the proper function of the eyes under the fatigue and exposure of flying) is discovered the applicant should properly be disqualified. The presence of nystagmus or strabismus usually constitutes a disqualifying defect.

The determination of central color vision should be achieved by the use of the Ishihara test. The candidate for flying should be rejected for flying if he is color blind because he is unable to determine danger or proceed signals or flags from the air; and further because he is unable to evaluate the presence or absence of suitable landing fields from the air while flying cross-country.

The applicants are subjected to ophthalmoscopic examination, and if found to have definite ocular disease or abnormalities, they should probably be disqualified. The aviation examiner should bear in mind the fact that retinitis pigmentosa is frequently associated with night blindness and for night flying at least would be a serious disqualifying defect. It has been interesting to note in an experience of many years in the examination of aviators that, while a fair number of men are found to be color blind, the writer has never yet found a woman who is color blind.

It is required that one have normal ears as to the ear drums, and a patent eustachian tube. One should be able to hear the whispered voice at eight feet or more. If there is any suspicion of auditory nerve involvement, the application of the Rinne tuning fork test should be resorted to. Naturally diseases, acute or chronic, of the internal ear or mastoid, or unhealed perforations of the ear drum should be disqualifying. One should have a healthy nose and throat, and nasal accessory sinuses. These conditions are particularly disqualifying if they are causing symptoms of focal infection.

To have success in flying an airplane, one must have a normal sense of equilibrium. Perhaps a normal sense of equilibrium is not absolutely

necessary in the operation of aircraft on a perfectly beautiful day with a well defined sky line. Without such satisfactory flying visibility, a sense of equilibrium is vitally necessary. On the other hand, it has been found in blind flying activities that not only does one not have an advantage from a sense of balance, but that the perversion of the sense of balance in blind flying without proper instruments will surely terminate the flight in a crash or fatal accident.

If one is placed in a revolving chair, and turned to the right with his eyes closed, and the turning motion is then completely interrupted, the individual (with his eyes still closed) will feel that he is turning to the left or in the opposite direction. It can thus be realized from this simple experiment of the cerebellar and middle ear function, that if one flying blind were to go into a right hand spin (and he would shortly realize that he were in a right hand spin), he would probably bring the ship out of the spin into a position of straight-away flight. Tragically, however, the continued motion of the endolymph would give him the false impression that he was then turning to the left. He would then attempt to bring the ship out of a left hand spin under conditions of his being in straight-away flight, and would promptly (in his effort to overcome his false sense of whirling), kick the ship off into a right hand spin. From that moment on there would be a complete disorientation until the picture would be violently closed by a crash into the ground or until the jeopardized pilot might be favored with the rare break of good luck by spinning beneath the fog where he could then, by the use of his eyes, determine the direction in which he was spinning, and perhaps bring the ship out of the spin in time to make a safe landing. Perhaps in no other place in mental processes is one's life so utterly dependent upon disregarding one's feeling as to the sense of direction and relying only upon instruments as is the case in a blind flying operation. It is most difficult to believe that a turn and bank indicator is telling the truth when it indicates for instance that the ship is in normal straight-away flight, when the pilot is so overwhelmed with the conviction that he is spinning in one direction or the other. Likewise it is very difficult to believe, when one has a feeling that the ship is climbing or diving, that such is not the case, because the rate of climb meter, or the sensitive altimeter reads to the contrary.

Applicants are tested for their sense of balance by flexing one knee to the right angle with closed eyes and maintaining this position for fifteen seconds. If there is an inability to perform the self-balance test in three trials, one must suspect evidence of the disease of the brain stem, the inner ear or of the spinal cord. It would then be proper to more accurately evaluate one's sense of balance and reactions to whirling by the use of the Barany chair.

In the development of aviation medicine, symbolic neurology has occupied a conspicuous place in the educational program. Organic neurology seems to have been less emphasized.

Symbolic neurology deserves unusual prominence in the field of aviation medicine because the prospective pilot will become subjected to the stresses of adjusting himself to a new environment. Psychologically speaking, individuals have not yet developed an ancestral habit which endows one with a predisposition, at least, quickly to adjust his numerous mechanisms in the development of the instinctive side of flying. The tendency, in the beginning of a flying career, is toward the mechanical operation of aircraft. Experiences, especially now in times of great human unrest, clearly indicate that the presumptively stable human organism is inclined to develop evidence of neuropathic tendencies when subjected to the unusual stresses of the day. Reactions of emotional instability are prone to manifest themselves among airplane pilots when there is added to the everyday stresses, the exacting trials of instrument flying. Aviation examiners, because of constant inquiry into the problems of personality traits, have developed a superior knowledge and understanding of the early signs of emotional instability. Organic neurology, regarded as perhaps the most difficult branch of medicine, seems to present a greater problem than the so-called functional side of neurology. As in any other restricted field of diagnosis, one who deals almost exclusively with organic neurology has available an abundant supply of clinical material. In constant contact with cases there comes a knowledge which renders commonplace certain neurologic syndromes, which would otherwise be poorly evaluated as to true diagnostic significance.

Neurologists are at times interested by an attitude of perplexity about neurological diagnoses in workers who are expert in other fields of medicine and surgery. The neurologist is no

doubt, and prominently so, the object of interest when similarly perplexed over diagnoses in fields other than his own. Interchange of ideas should result in a stimulus which will broaden one's method of thinking, and thus enable the examiner provisionally to classify his findings in specialties in which he has not had opportunity of a particularly extensive experience.

The study of organic neurology presumes a fair knowledge of neuro-anatomy and neuro-physiology. The classical diagnostic entities of organic disease of the central nervous system number approximately sixty. So long as the lesion under diagnostic consideration is limited to the classical departures, the diagnosis is comparatively simple. With widespread involvement, creating mixed lesions, the classification becomes more difficult of interpretation.

Neurologists have, unfortunately, been regarded as specialists whose effort is usually aimed at the treatment of the hopeless, degenerative lesions of the central nervous system. Because of limited clinical material, neurologists frequently combine the work of neurology with psychiatry. While a knowledge of psychiatry is indispensable to a proper understanding of neurology, it has been an experience that the neurological patient is reluctant to consult one who has the reputation of dealing with the problems of abnormal psychology, because of the justifiable fear that others will regard him as being mentally ill.

Neurologists, in presenting some of the details of neurology for the consideration of doctors in other fields of medicine, have been encouraged by the manifestation of an unusual interest. Physicians and surgeons are beginning to realize that a practical working knowledge of neurology is a valuable asset to other medical and surgical effort.

With the advent of rapid transportation facilities, highway hazards have become appalling and there has occurred a death rate that is colossal in its proportions. The neurologist has been called upon to offer his diagnostic opinions and professional advice in a large number of injury cases, involving trauma of the brain, spinal cord and peripheral nerves. The opportunity thus afforded has brought the neurologist out of his stereotyped methods. He has had the opportunity of a new and inspiring contact with the specialists of other fields, whose services likewise have been indicated in the care of the injured.

Out of this renewed activity has come a special effort in the field of emergency neurosurgery to supplant the former field of elective neurosurgery. Elective neurosurgery has been very highly developed, there having been not a large group of workers, but a pioneering, faithful few.

The aviation medical examiner, dealing as he does, routinely, with a group of potentially healthy people, so infrequently encounters organic disease of the brain, spinal cord or peripheral nervous system, that the effects of a negative attitude will cause him to become inclined not to "see with seeing eyes," diagnostically speaking, unless he trains himself into the habit of a systematized routine method of observation. Schooling himself to think in terms of that which he least expects to encounter, viz., organic lesions of the central nervous system, will cause him to sense, in the conscious realm of his sensorium, instant warning of a departure from the normal.

To the trained neurologist, observation as to disturbance of station and gait, for instance, becomes more or less automatic. As an applicant (usually devoid of clothing) walks into an examination room, he may exhibit an uncertainty of gait. His feet may make impact with the floor in a manner suggesting loss of position sense. Furthermore, an attitude of walking with the limbs too far apart; a bent over posture with arms hanging motionless at the patient's side as he progresses, may be observed. A lack of associated movements would thus be suggested. Coupled with this syndrome one may observe an expressionless face, the so-called mask-like features. One upper extremity may be held slightly flexed and motionless while the other swings in a normal manner. A hemiplegic syndrome may thus be suggested.

Thus the examiner may have had his attention directed to a number of possibilities suggesting organic disease of the central nervous system, without having spoken to his patient, even though the period of observation has been just a fleeting period of time. Syphilis of the central nervous system; potential tabes dorsalis, may have been suggested by the uncertainty of gait. The suggestion of diminished associated movements may cause one to suspect a mid-brain lesion, especially if coupled with mask-like features. If diagnostic possibilities are thus objectively presented and the examiner is in the habit of thinking in terms of neurology, further elaboration of systems will become fruitful.

Assuming that the patient has an uncertainty of gait, aside from neurosyphilis, one must consider other causes of disturbance of gait, more prominent among the causes being a cerebellar lesion. A cerebellar lesion may be congenital, vascular, traumatic or neoplastic. With the diagnostic possibilities in mind, it should be a simple procedure to cause the patient to stand with his feet approximating each other, and with eyes closed, attempt to balance. If he has tabes the consequent loss of position sense, because of the involvement of the posterior columns of the spinal cord, will demonstrate ataxia by his inability, normally, to balance himself with eyes closed. The finger-nose and finger-finger test will quickly demonstrate ataxia of the upper extremities. A tuning fork with coarse vibrations applied to the anterior surfaces of the tibiae, will reveal faulty or absent vibratory sensations. With eyes closed, the patient, under circumstances, would have faulty perception of position sense while the examiner exerts pressure in a given direction on the great toe on each foot. Coupled with these observations, it should not be difficult for the examiner to observe the presence of unequal, irregular pupils that fail to react to light but accommodate properly,—the typical Argyll-Robertson pupil. The Argyll-Robertson pupil, so long regarded as proof positive of brain syphilis, no longer constitutes a diagnostic finding totally in favor of syphilis. This classical manifestation of the involvement of the ciliary nucleus may result from encephalitis. One, likewise, must never forget that pupillary inequalities may constitute the residuals of a brain injury in skull fracture cases, because of trauma to the trunk of the third nerve as it courses the base of the skull.

With possibilities thus far evaluated in a hypothetical patient, further consideration of his possible cerebellar lesion must be made. A congenital cerebellar lesion may present no symptoms other than defect in balance. As a practical diagnostic dictum, one may safely assume that those who show no defect on being subjected to the Barany, whirling chair test, undoubtedly have an absence of cerebellar lesion. Clinically, the presence of nystagmus dysarthria, adiadokokinesis (inability to arrest one motor function or impulse, and substitute one that is diametrically opposite) may justify the presumptive recognition of a cerebellar lesion. If a neoplastic lesion is present there will surely be found oph-

tholomoscopic evidence of intra-cranial increase of cerebrospinal fluid pressure, namely papilledema. If brain tumor is suspected a more searching inquiry for cardinal symptoms becomes a necessity. X-ray examination of the skull and air ventriculography offer a very spectacular and entirely reliable method of eliminating the question of brain tumor. Tumor of the third ventricle can only be diagnosed by air.

Incident to the investigation of a dysarthria, the examiner will have observed any tendency towards speech defect otherwise, especially the slurring type of speech in cases of locomotor ataxia, or the scanning type of speech in multiple sclerosis. In multiple sclerosis one will usually elicit the tragic history of onset of weakness of the legs, followed by widespread sensory disturbances, with a remarkable tendency towards remissions. There will develop intention tremor of extended fingers and the abdominal reflexes will disappear. In advanced cases of multiple sclerosis bitemporal pallor of the optic nerve heads, due to a lesion of the optic chiasm, a point of peculiar predilection, will usually be observed. Should an acoustic neuroma or a tumor in the cerebellar pontine angle be suggested, one may quickly elicit the history of vertigo, marked tinnitus, extra-ocular palsy and facial hemiatrophy, the latter being due to involvement of the fifth and seventh nerves. Incidentally, the presence of an isolated ocular palsy in a young adult should cause one to persist in the idea of the existence of neurosyphilis, even in the absence of positive laboratory findings.

Intra-labyrinthine vertigo constituting a typical Meniere's syndrome, must answer the diagnostic dictum of unilateral tinnitus with progressive loss of hearing. It may not be amiss to mention at this point that the best cure for Meniere's disease appears to be intracranial division of the eighth nerve on the affected side. Deafness is thus produced, but relief from dizziness is obtained. Meniere's disease, contrary to common opinion, does not always progress to the point of disappearance of vertigo, even though deafness on the affected side seems to have occurred.

Neurologically speaking, one must be alert for cases of transient deviation of the eyes in the young adults with neurotic tendencies. The condition occurs and is not susceptible of demonstration on the basis of a classified underlying organic defect.

Central scotomata may suggest an organic

lesion, but scotomata are frequently functional in nature and constitute a hysterical manifestation. A practical means of differentiation, in hands other than those of an expert ophthalmologist, is the absence of variation in the size of the organic scotomata at varying distances from the tangent curtain.

Neurologists have learned that occasional cases of acute glaucoma precipitate themselves in subjects of neuropathic taint. The etiology is unknown. The knowledge that an acute glaucoma may thus appear is of vital interest to the examiner in dealing with pilots who show signs of beginning unfavorable impressions upon their nervous system.

Facial drooping, extra-ocular palsy and similar departures from the normal about the face are usually so self-evident as to render their non-recognition by an attentive observer most unlikely. In considering emotional manifestations—for instance, facial blushing—one must not be too hasty in concluding that the phenomenon necessarily constitutes the evidence of an impressionable personality, for it must be borne in mind that lesions of the fifth nerve, harmless in nature otherwise, may cause chronic facial blushing.

Inquiries into the matter of the special sense of smelling may reveal a history of the presence of obnoxious odors, so-called hallucinations of smell. If due to intracranial causes and not to rhinological pathology, one may consider the possibility of an uncinate gyrus attack; hallucination of smell, usually followed by a dreamy state is indicative of a lesion of the temporal lobe.

If central nervous system syphilis is to be differentiated from multiple sclerosis, laboratory studies must be indulged in, especially examination of the spinal fluid. One must bear in mind that cases of multiple sclerosis may show a persistent tabetic curve on Lange's colloidal gold test, and that, consequently, many unfortunates have been subjected to unwarranted and useless anti-syphilis therapeutics.

When one is in doubt about the presence or absence of associated movements, bearing in mind that certain individuals are in a state of mild psychomotor tension, or by habit otherwise do not swing their arms when walking, we may cause the applicant to flex the fingers and thumbs of both hands; if in the act of extending the fingers and thumbs from the position of flexion, there is a lagging behind of the thumbs in the

movement of extension, one may be sure of the existence of a mid-brain lesion.

One may elicit a history of facial pain. In neurotic individuals, facial pains are frequently functional, the so-called topalgias. These usually run a chronic course and the subject thereof, even though displaying no additional signs of neurological defect, should be disqualified for flying duty. Veteran pilots may develop a true tri-facial neuralgia. *Tic douloureux* is an affection limited almost always to one side of the face. The pain is never posterior to the ear. Drafts of air, touching so-called trigger zones of the face, the act of mastication, brushing the teeth, or even combing the hair precipitate the attacks. The warmth of a pillow on the affected side during the sleeping hours frequently brings on the excruciating type of pain. True tri-facial neuralgia may be confused with a painful tic of the ninth nerve. In the latter, pain is usually caused by the act of deglutition. A trigger zone in the throat can be isolated and the pain produced by pressure on this particular point. The existence of fifth or ninth nerve tic certainly constitutes a disqualifying defect. Fortunately, the surgical cure is so certain that restoration of health and resumption of flying duty should be possible in these cases. In the case of a pilot one would probably favor division of the fifth nerve intracranially at the point of emergence of the tri-facial from beneath the pons. At this point a partial division of the sensory root will usually result in a cure. There is no danger of injury to the motor branch. The posterior approach is followed by only partial anesthesia and there is an absence of keratitis, such as is encountered in following the temporal approach. Because of the little danger of keratitis, meticulous care necessary to avoid corneal ulceration is unnecessary. Division of the ninth nerve intracranially gives uniformly satisfactory results in the relief of pain. Pilots thus operated should recover without post-operative residuals and should be returned to duty without disqualifying defect for flying.

One must bear in mind that in cases of non-regeneration of the seventh nerve in cases of Bell's palsy that it is a surgical possibility to chisel the affected nerve trunk from its bony canal and thus give room for swelling, with a final curative result. In the cases of Bell's palsy where all other measures have failed, the surgical anastomosis of the affected nerve trunk with the

spinal accessory nerve will give almost completely satisfactory results after the patient has been trained to favor the act of facial movement by assisting the movement with the act of shrugging of the shoulder. This compensatory effort is quickly learned, and patients adjust themselves to the deliberate muscular act of facial expression with remarkable facility.

All applicants for flying are subjected to a personality study, the purpose of which is to determine the condition of the candidate's nervous system in relation to temperament, intelligence and volition. One must take into consideration in the psychological examination of the flying applicant his family history, his personal history, the environmental factors that have influenced his life, and the aspects of his play life. Of particular importance is a careful consideration of the sex life; particularly of specific sex demands. The degree of education and its influence upon the pilot is of importance. The consideration of one's disciplinary record, if formerly in military service, and conflict with civil authorities is of importance. The examiner should delve freely into a consideration of the trend of thought of the applicant.

If the applicant is already a pilot, his flying history with reference to accidents or unusual incidents should be given consideration. The general personality trend of the individual should be evaluated.

In many respects the methods of personality studies as used are along the line indicated some years ago by Dr. Amsden and are in general accord with the methods taught at the U. S. Army School of Aviation Medicine. Dr. R. F. Longacre, formerly Major Medical Corps, U. S. Army and a former member of the faculty of the School of Aviation Medicine and later Medical Director of Aeronautics Branch of the U. S. Department of Commerce, has contributed more perhaps to this phase of an aviation examination than any other specialist. The whole procedure should be conducted along psychological and psychiatric lines. Necessarily, if one is insane he is disqualified for flying. The aviation examiner should earnestly attempt to summarize the personality and to indicate reactional assets or liabilities in such wise as to gain insight concerning the probable general course of action the pilot will likely follow under given circumstances and the probable reaction to flying experience in general. In working towards this

summary and insight, one must attempt to expose to view the total experience of the individual ranging through infancy, childhood and adolescence, having in mind also antecedents and inherited factors. The manner in which a pilot applies himself to the inquiry incident to an examination is both important and significant. As a rule no informants other than the applicant are at hand, and it therefore becomes necessary for the examiner to exert himself to overcome inhibitions, develop cooperation and distinguish between fact and self-serving declaration. The psychological study when properly formulated is intended to represent the results of an investigation of the conscious life of an individual as mirrored in the individual's behavior.

The psychiatric study endeavors to determine whether the personality expresses itself within normal range limits or whether there are deviations in directions either psychoneurotic or psychotic. Deviations in directions psychoneurotic often have the value of mere color only, and do not necessarily indicate unfitness. Measuring the degree of such coloring often becomes a baffling problem and its solution and compromise with decision against the individual for the reason that the pilot not only has his own life to safeguard, but those who may fly with him as innocent and helpless passengers are entitled to the benefit of any existing doubt. Herein arises one of the most serious responsibilities in the professional activities of a doctor. Many individuals shade off below the lower range limit of that which we term normal, into the neurasthenoid, the hysteroid and the psychasthenic without recognition of the make-up either because favored by circumstances or undiagnosed. One must investigate the intellectual activities, the somatic demands, the self-criticisms or self-estimate, the urgency or imperative towards adaptation along with the emotional life and trends. It is desirable that one have demonstrated a steadfastness of purpose in acquiring certain educational requirements, especially a broad technical knowledge of the science of flying. The examiner is not so much interested in what the pilot knows as he is in the scope and play of the intellectual activities, the receptivity, the acquisitiveness, the retentiveness, how experience is rationalized and how constructively it has been used. Of the body demands, some are expressed vaguely, others conspicuously and in varying degree and intensity. On the whole, the personality study is for

the purpose of developing an index of the degree to which the individual is unwholesomely committed to sensuous reaction. In general the more conspicuous somatic or body demands are for motor activity and sex expression. Naturally motor activity is a display of push and energy, and controlled enthusiasm. Another line of inquiry is related to a self-estimation and self-criticism, and the associated reaction within the nervous system. There is a natural tendency to compare ourselves with others and their manner of dealing with problems and handling situations. If the comparison be favorable, the feeling is one of ease and security with ingenious acceptance or capability or adequacy. If the comparison is unfavorable, there is apt to be a feeling of discomfort and insecurity breeding the fixed body of self-depreciatory thinking known as the inferiority complex. Once established, this affects adequacy and accomplishment producing on one hand the shrinking, clinging dependent type, and on the other those whose bluster and self-assertiveness are compensatory and substitutive reactions. While countless individuals, especially of the latter group, go through life with fair success although thus motivated, such attitudes nevertheless are unwholesome, and these personalities are unsuited for flying duty. They are unsuited because these feelings of insecurity and inadequacy affect the individual in all of his relations and bring into undue relief those qualities which tend toward incompetency. All normally constituted individuals express an inner urge to adapt to environment. Thus this urge towards adaptation which causes the individual to maintain those cultural and recreational group activities are absolutely essential for rounding out the personality. A fundamental purpose of the entire examination is to measure the degree of nervous stability. The examiner studies the candidate's emotional stability in the light of the life history and reactions of the moment. In this direction one cannot forecast, other than as a probability, for none know including the individual concerned, unless already proven by trial what his reaction to instant emergency will be, especially if his very life be the forfeit. Let us remember that as Dr. Longacre has said (and the essayist has drawn very freely upon things Dr. Longacre has taught him and herein quotes him freely) that "a moment of time must serve in emergency at

speeds upward of two hundred miles per hour in an unstable medium with fatality as the penalty of error or delay."

In general the entire examination attempts to show the proportion of the optimal qualities of an individual as compared to his unfavorable qualities.

One must remember that in a subtropical or tropical country there is that which is termed hypothyroid asthenia, a condition which does not predispose one to success in flying. Likewise in the cases of women pilots, it is a requirement that they be sternly warned that they must not attempt to fly within three days preceding or three days after a menstrual period.

The demonstration of the deep and superficial reflexes is a procedure so trite that discussion seems unnecessary. Absence of abdominal reflexes should cause one to suspect the presence of pyramidal tract signs, although abdominal reflexes may be congenitally absent, and should suggest always the possibility of multiple sclerosis. The familiar sign of Babinski, Hoffman's hand sign, Gordon, Oppenheim and Chaddock reflexes, indicating as they do involvement of the pyramidal tract system, are signs never seen in health. It is suggested that in examining for pathological reflexes one should, in behalf of scientific thoroughness, habitually observe the opposite side as well as the side being specifically examined, because of the occasional occurrence of a contralateral reflex, especially the Babinski sign. The Babinski sign may exhaust itself after a simple stimulation and is not again demonstrated until after a prolonged period of time.

The aviation examiner versed in neurological diagnosis may find himself in the position of indicating the site for surgical approach in the operation of cranial decompression. Irrespective of the external signs of fracture, and bearing in mind that skull fractures are of interest only in relation to the degree and location of injury to underlying brain structures, the point of paramount interest becomes one of localization and may depend entirely upon the observance, in a single instance only, of a Babinski sign, or other evidence of localizing value as is manifested by a pyramidal tract sign.

The examiner, in dealing with his traumatic cases, must think in terms of neurological segmental spinal cord diagnosis. Opinions are based on mapping out specific areas of sensory disturbance, and dependent for their proper interpretation upon the examiner's knowledge of spinal

cord segmental distribution. Unless one is dealing frequently with the problem of localization of spinal cord injuries, reference to the many charts upon the subject will enable one quickly to determine the spinal cord segments specifically involved.

Spinal cord tumors, especially the extramedullary type, are almost invariably more prominent as to symptomatology after the performance of spinal tap. A spontaneously coagulating xanthochromic spinal fluid may be occasionally encountered and indicates either a chronic inflammatory lesion or a neoplasm.

If a neoplasm or spinal canal block from other causes is present, this fact may be determined by Queckenstedt's test. Queckenstedt's test is based upon the theory that the cranium is a bony, inelastic, unyielding vault. Intracranial capacity can only be compensated for by erosions, cracks, cranial suture separation or by compression of the ventricular spaces. Queckenstedt observed that compression of the jugulars in the neck obstructed venous outflow from the skull. This space encroachment could only be compensated for by compression of the ventricles. Spinal fluid would then be displaced into the spinal canal, making exit from the ventricles through the foramina of Luschka and Magendie.

If a spinal puncture needle with manometer tube attached had previously been introduced, the elevation of spinal fluid pressure would be indicated by a rise of the spinal fluid level in the manometer tube. If a block, either from tumor, spinal column fracture, or from an inflammatory block, exists there will be no rise in the level of the spinal fluid; thus the nonpatency of the canal is demonstrated.

Lipiodol injections through the cisterna magna will give x-ray evidence of the location of a block. Lesions above the cauda equina or below the bifurcation of the trachea may be demonstrated by intraspinal injection of air with patient in the upright position. As the air ascends and reaches the point of spinal canal block, the patient will complain of a sudden pain. The distribution of the pain is spectacularly limited to the spinal cord segment involved. Subsequent x-ray examination will afford photographic evidence of the location of the air bubble.

In cases of spinal column injury following an air accident, examiners should bear in mind that although there may be no evidence of spinal cord block within the first day, spinal cord edema may so progress as to produce a block with dangerous

pressure symptoms and, therefore, Queckenstedt's test should invariably be repeated in these cases. Incidentally, it may be mentioned that in cases of lateral sinus thrombosis, Queckenstedt's test, positive on the side of the thrombus and negative on the unaffected side, offers a positive means of identifying the presence of the lesion. The procedure is a definite index as to indications for operative interference.

Particular stress should be laid upon the necessity of properly evaluating sensory disturbances, especially those involving the hands. The presence of numbness in the hands may be the initial symptom in an otherwise healthy appearing individual who is entering the beginning stages of pernicious anemia. In the writer's experience in the examination of military subjects, at least one case of leprosy was overlooked, even though the individual presented the typical leonine facial expression and displayed prominent symptoms of leprosy anesthesia with the usual ulnar nerve predilection.

One must bear in mind that brain tumors weighing as much as a hundred and eighty grammes may be present in the silent areas of the brain for many years without giving rise to a single symptom. The presence of these tumors is usually first suspected because of the occurrence of violent generalized convulsive seizure in an otherwise presumptively healthy individual. It is not difficult to visualize the importance of a situation of this kind in a pilot. The tumors thus suggested are usually located in the frontal lobe. A retrospective study of frontal lobe tumor cases indicates that the only sign prior to convulsive seizure may be a tendency towards absent-mindedness, expressed in terms of loss of memory for events of immediately recent origin. Frontal lobe tumor patients have been observed holding a burning match in the hand while in the act of conversing, apparently forgetting that a cigarette or cigar was to have been lighted, and evidenced no apparent realization of the presence of fire until a finger burn had occurred. One patient, with frontal lobe tumor, was observed to pause in the act of partaking of a spoonful of ice cream, the spoon of ice cream being suspended in mid-air, the patient meanwhile talking in a perfectly lucid way, but apparently oblivious of the retarded and interrupted act. These cases were known to have frontal lobe tumor, the presence of neoplasm having been demonstrated previously by air ventricu-

lography and subsequently by surgical removal.

In the realm of brain tumor diagnosis, one cannot always rely on x-ray examination of the bony skull to the exclusion of air ventriculography. It is true, if arborized blood vessel markings are seen, if suture separation has occurred, if erosions and calcifications are visualized, one may then rationally establish a diagnosis of tumor. If in doubt, air ventriculography will clarify the diagnosis. When one exhibits signs and symptoms of severe intracranial disease with tumor suspected, the patient is entitled to know, as the result of air ventriculographic studies, whether or not he has a removable tumor or whether he is confronted with adjusting his life to the disabilities incident to a chronic, inflammatory, destructive lesion.

Thus the aviation examiner, incident to the general examination of pilots, may profitably indulge in the contemplation of many of the signs of neurological defect. With an impression of the probable nature of the lesion, cases can at least be more intelligently referred to the particular specialist from whose hands further expert diagnostic elaboration is needed. The ophthalmologist may be able to localize the lesion if it be an intracranial one, by determining, for instance, from the exact type of hemianopsia if the lesion is anterior, within or posterior to the optic chiasm.

The manifestly evident neurological defect of external rectus palsy may not unfold itself in its diagnostic significance to every examiner, but if the case is referred to the ophthalmologist he may demonstrate the existence of a classical Montenegro syndrome, dependent on sinus infection and involvement of the third, fourth ophthalmic division of the fifth and sixth nerves. Thus accurately classified there can be no doubt as to the incurability and chronicity of the lesion, nor will there be any doubt as to the wisdom of permanently eliminating the patient from the realm of flying.

There is a growing realization that the neurologist is after all not working within entirely narrow limitations, but he is delving into many of the intricate ramifications of all fields of diagnosis. The problems of neurology are so intricate that perhaps no human mind can possibly grasp it all within the span of a human life. The aviation examiner with neurological ability offers his mite, however, in the realm of diagnosis. He is rewarded by results, particularly in the field of

neurosurgery, that are comparable to the spectacular results in the general fields of surgery. The dramatically successful effort following operation for tic douloureux and tic of the ninth nerve, arterial sympathectomies for relief of Berger's disease, angiospasm, erythromelalgia, the relief of meningeal pain by excision of the inferior cervical and first thoracic ganglia through the mediastinal route, along with the superior cervical ganglion, afford results that compare favorably with surgical effort in other fields.

The aviation examiner deals with those who are required to be in an excellent state of health. One must realize that all humans enter the world, potentially, with brain injuries, and that they may thus become stigmatized with lesions incident to birth. Individuals may be so slightly ill as scarcely to remember their initial symptoms, yet may, as the result, be subjected to the terrible end-effects of encephalitis with its classical and hopeless Parkinsonian syndrome. One must conclude that in the realm of the activities of the aviation medical examiner there is a grave necessity for constant neurological alertness in order that diseases of the brain and spinal cord may be recognized at a period when satisfactory therapeutic results may be obtained or disaster avoided. It is not difficult to visualize end-results in the field of flying should insidious symptoms of organic disease of the central nervous system go unrecognized.

As has been said by Dr. Longacre, in addition to determining physical fitness, degree of intelligence, emotional stability and aptness of volitional responses, the examiner has another and greater problem, namely, that of human fallibility—the pilot makes the wrong decision, his judgment is at fault. For this no solution seems to offer. The importance of this is diminishing as airplanes are becoming more stable and construction is permitting landing at lower speeds. As Dr. Longacre has said also “perhaps ten thousand years hence, an air-minded race will have laid down correct habit pattern, reactions within the organism, and then and not until then error in the air will be a phenomenon interesting only antiquarians.” We stand at the threshold of the era of flight, lacking favorable predisposing ancestral habits, we must strive with instinctive flying mechanisms which are at best only quite rudimentary.

As has been shown by Dr. H. Marshall Taylor in his outstanding studies of man's effort to

abandon his terrestrial habits and become an aquatic animal, he has failed miserably and has paid the penalty by acquiring sinus and middle ear infections.

Aviation medical studies are definitely intriguing for with these pilots we must deal with the functional disturbance manifested by them and save them as much as possible by well considered selection and supervision. In aviation medical work, the thoughtful physician has entree to the secret places of the spirit and spends his days in the school of schools for acquiring what Dr. Adler calls “understanding human nature.”

Man, in his effort to become a celestial being, has God and himself to depend upon while in the skies.

The writer is of the opinion that to learn to fly an airplane efficiently contemplates an effort as great or greater than that required in securing a university education. This effort must be coupled with an extraordinarily developed degree of nervous stability. The writer is of the opinion that those who insist that one can be taught to fly an airplane in ten hours are making a pronouncement which (as to its end results) is sinister and foreboding. Perhaps one can learn to take an airplane up and down within the confines of an airport within a few hours. Let that individual be confronted with the problems of navigation and the hazards of bad weather, and his brief hours of flying experience will not serve him well.

The writer has at times wished it were possible that every amateur flyer could have placarded on the instrument board before his eyes the statement that “while airplanes may be fool proof, they are not damned fool proof,” and that manufacturers only guarantee one insanely executed zoom to a customer. There are old pilots, there have been bold pilots; there are no old and bold pilots for the bold ones have been killed. No airplane pilot will function successfully beyond the last fatal drop. Just how long one may avoid this last fatal drop is a matter of conjecture.

The writer has had the privilege of an experience of twenty-two years of flying observation, and of a flying association with some of the world's greatest airplane pilots. It has been a privilege to see the tragic history of aviation turned page by page, almost from the beginning. It may be safely stated that a majority of those to whom I have referred, have, in spite of their

aviation greatness, finally suffered a fatal aviation accident.

Among the five hundred scheduled air-line pilots of this country, many of whom are engaged in night flying activities, there has been for a period of five and a half years, a death of one of their members at the controls of an airplane every twenty-nine and a half days.

Just now those with a broad experience in flying are figuratively speaking, and perhaps in some instances actually so, viewing through tear dimmed eyes, the tragic picture of the flaming youth of the Air Corps going to their deaths in an effort to transport the U. S. Mail. These youngsters, most of whom have not over four hundred hours of solo flying, and perhaps an average of fifty hours of night flying; and with equipment designed for military flying are attempting to take up on a day's notice the task of transporting the mail. These young military pilots are attempting to function as replacements for airline pilots, the most humble of whom have had three thousand hours of commercial flying (in many instances most of which has been at night) and with a military background with which to begin.

Out of every evil comes a great good perhaps, and as has been the case, with every human development there will come from this present day experience a most efficient air service and a more secure national defense.

I would say to those who wish to fly that it is not an impossible accomplishment, but it is an effort which warrants broad training and extreme caution.

As to fair weather flying over territory in which the terrain is favorable and known to the pilot, estimating that the pilot has a reasonable degree of experience, and that his flying equipment is modern and properly maintained, there is probably no greater risk than in other means of rapid transportation. The increasing speed of automobiles, and the national annual death rate of thirty thousand people from automobile accidents, along with the injury of a million and a half people—causes most of those who have survived through some years of flying to believe that under favorable conditions of flying above outlined, one is fortunate indeed to have the opportunity of the safety and security of this particular type of flying, rather than to be subjected to the tremendous hazards of driving an automo-

bile at a rapid pace over our present system of highways.

Physicians who are interested in aviation medicine will find, as a result of the neuropsychiatric studies that are incidentally necessary, there will come an ability to evaluate and more intimately know the problems of their patients. This I do not believe can be accomplished in any other field of medical activity.

In the preparation of this article I have quoted, from memory in most instances, the expressions of many of the outstanding aero-medical authorities of aviation medicine. It has been impossible to develop an accurate bibliography or to give specific credit to those whose thoughts and expressions I have frequently and freely incorporated in this article.

DR. HENRY PERRINE*

EDWARD JELKS, M.D.,
Jacksonville.

The Florida East Coast Medical Association is meeting in a section of the State rich in reminders of the men who have worked for the safety and progress of Florida. General Worth, Major Lauderdale, and Major Dade are names which we associate at once with a beautiful lake (Lake Worth), a thriving city (Ft. Lauderdale), and a growing county (Dade), whose magic metropolis occupies the center from which stretch the vast continents of North and South America. It is fitting, as we meet in Coral Gables, that we pause to think of and honor one of our own profession; one whose last days were spent not far from here and whose permanent home was to have been almost within the present city limits of Miami at a place now called Perrine, in honor of him.

Dr. Henry Perrine never made his home at the present site of Miami because of the Indian disturbances which Worth, Lauderdale and Dade had tried to quiet. It was toward the end of these Indian wars that Dr. Perrine, in 1838, was granted by Congress a tract of land about fifteen miles south of Miami. His ambition was to introduce from Central and South America, plants which he thought would grow here to great commercial advantage. Even though he was spared for so short a while, he did bring into Florida and cultivate fifty-seven seeds or

*President's Address, delivered at the Florida East Coast Medical Association meeting in Miami, October 27, 1933.

plants which we think of today as native. Twenty-four of these were of value for the fibre they contain. Who can predict how many more might be today the valuable and interesting plants of Florida, had there not been a massacre on Indian Key during the night of August 6, 1840. Let us read the story of this event as told by the Doctor's daughter, the former Mrs. James Walker of Fernandina:

"On the morning of the 7th of August, 1840, between two and three o'clock, we were awakened from a sound sleep by the Indian war whoop and the discharge of guns. . . . Father, mother, Sarah, and myself sprang from our beds at the same time, while the Indians were firing at the chamber windows, and the glass falling. . . . We ran down to a small room at the foot of the stairs, in which was a trap door that led to the cellar, which we used for bathing. . . . Father accompanied us to the door, and then said, 'I will go back and see what I can do.' Soon after he went upstairs mother called as loud as she dared to him, and told him he had no caps to his rifle. He replied: 'I know it, but I will see what I can do.' I constantly entreated mother to go down into the water, but she refused, thinking father would soon be down to go with us, until we heard the Indians breaking into the house of Mr. Howe, which was opposite ours. I then told my mother they would soon break into our house, and we would all be murdered. We then went into the cellar, passed through the bathing room into a small place, say four feet high, four wide, and ten long, (adjacent to the wharf). . . . Under this wharf was a large turtle crawl (or pen). Soon after we had secreted ourselves in this place, I heard my father on the upper piazza calling to the Indians in Spanish, telling them he was a physician, upon which they gave a shout and left the house.

"While they were gone, it was evident to us from the noise we heard, that my father came down and closed the trap door through which we had passed, and drew a heavy chest of seeds that was in the room over it, thinking, no doubt, he should be saved, and thus by doing, he might save us. And this kind act was the last my dear father ever did for his family. During this time, we heard the Indians breaking into the different houses, while ours remained untouched. But about daybreak they returned, jumped upon the piazza, and commenced battering away at the doors and windows, and we heard one of them

say, 'Stop that.' They then rushed upstairs; the same voice said, 'They are all hid; the old man upstairs'; for my father had evidently retreated to the cupola, which was entered by a heavy trap door. Soon we heard them pounding at that door with most horrid yells, but from its strength, it resisted for some time, but when it gave way their yells were like demons, and it was then that their most cruel and heartrending work was accomplished—the massacre of my dear, lamented father."

Dr. Henry Perrine was born April 5, 1797, at New Brunswick, N. J. In early manhood he taught school at Rock Hill, N. Y. Later he studied medicine. The young graduate of twenty-two years felt the call of the West, at that time the Far West of Illinois, and he settled in Bond county near Ripley to begin the practice of medicine. From there he wrote, under the date of November 15, 1820:

"I came here on the 30th of September, and got into business immediately. Dr. Drake was not as well satisfied as myself and declined doing much. By the first of this month I booked about \$200, of which \$55 was in one day. During the same month Dr. Drake made only forty dollars, not as much as I did in one day; of that \$55.00 I feel pretty certain of \$33.00, which will still make it a good day's work.

"About 22 miles above this is the new seat of Government laid out called Vandalia. A few reside there and by exposure several became sick. I was sent for to four, and the fifth was a negro. By law I am allowed 50 cts. a mile. That is \$11 apiece exclusive of medicine."

The four years spent in Illinois, no doubt, were most satisfying to Dr. Perrine if we are to judge by the letters which he wrote back to his family in the East. Those to his brother show him to have been afire with ambition to make for himself a place in the new growing State of Illinois. About the time his activities closed in this new State he wrote:

"By all that is free, and all is desirable in freedom, I had rather endure the privations of this country for years, with the prospects I have before me, than to live in Jersey for the same time among comparative conveniences."

But the fates seemed dissatisfied with such contentment for a man so capable of bigger and better things. At any rate, some urge kept Dr. Perrine from remaining long in any quiet life. Perhaps it was his health. At least his son writes

that he constantly was going south seeking a warmer climate. He moved from Illinois to Mississippi and then to Yucatan.

Before he moved to Natchez, Mississippi, in 1824, he married Miss Ann F. Townsend. They might have become permanent Mississippians but for an accident which happened while Dr. Perrine was practicing in Illinois. It is related by his son as follows:

"For the purpose of warding off or preventing an attack of the malady (malaria) he was in the habit of taking a certain amount of Peruvian Bark before going out in the malarious night air to visit a patient. The bottle and a measuring glass stood upon a shelf near by where he could place his hand upon them even in the dark. One evening having occasion to visit a patient who lived a mile or two away, he came hastily into the office, and, without waiting to procure a light, took down the bottle of Peruvian Bark, put the usual quantity into the glass upon the counter. A moment later his student came in with a candle, and at once saw the glass with some remains of the powder in it, and also a white substance mixed with it. He was horrified at the sight, for it was the result of his own carelessness, as he had left a quantity of arsenic in it . . . and father had unsuspectingly taken the deadly poison. Providentially the student knew where he had gone, and knowing that no time must be lost if life was to be saved, he rushed out, found a horse near by and mounting it barebacked, he hastened after at full speed. Fortunately, he succeeded in overtaking him before he entered the patient's house. The poison had already begun its deadly work, but on learning the cause of the burning pain the Doctor told his student what remedies to procure and apply, and their prompt use finally saved his life, but he was confined to his bed for many weeks, and never fully regained his strength."

After living three years in Mississippi, Dr. Perrine applied for the consulship of Yucatan. This appointment was made by President John Quincy Adams in January, 1827, and Dr. Perrine left the United States for an absence of ten years. We have not been able to locate records of his activities there as a representative of the government; however, the length of his stay would indicate that he was competent and satisfactory in this service. The most information we have of this decade in Yucatan is found in the writings of Dr. Perrine's son. He says that

the Doctor was almost as busy practicing medicine as he was attending to government affairs. Mr. Perrine relates of his father:

"During his stay in Yucatan he had attacks of both yellow fever and cholera, but both were conquered by his prompt use of his own prescriptions. While on a visit to the neighboring State of Tobasco he attended the Governor's ball by invitation. Not having his consular uniform with him (which in those days was quite rich and elaborate in its trimmings) he wore only the ordinary summer garb of the country. During the evening he approached the refreshment table upon which fruit and cakes were displayed, and helped himself to a piece of fruit. An ignorant and brutal soldier, standing as guard near by, without a word of warning, thrust his bayonet through his side. Father without making any outcry stepped over to where the Governor was standing, his boot by this time overflowing with blood, and told him what had been done. The Governor immediately drew his sword and cut the ruffian's ear and had him lodged in prison at once. In the meantime father was tenderly cared for and as no vital organ had been touched he soon recovered. I do not know whether the valuable gold belts which were presented to him by the Governor were bestowed as some compensation for his wound, or in recognition of his gratuitous services as physician among the poor."

After seven years of practicing medicine at home and ten years of public service abroad Dr. Perrine had completed his plans to carry out what he hoped would be his chief accomplishment. This was to introduce into the United States tropical and subtropical plants which would be a benefit to his country. In the selection of a location in which to do this work only one place appealed to him. That was Florida, and the part of Florida of which very little was known in 1837, the year he returned from Yucatan. After a year or more of Congressional maneuvering he was granted a township on Biscayne Bay, just south of the present location of Miami. Since the Seminole wars had not drawn to a close, Dr. Perrine, in order to insure the safety of his family, settled with them off the mainland on Indian Key, which is about forty miles south of here. He expected, just as soon as the hostilities ceased, to move his family to the township which is now Perrine, but the night of August 7, 1840, changed all these plans. Dr. Perrine was massacred; and his wife and three

children, two daughters and a son, returned to New York.

We, as a medical body, naturally are interested to learn what kind of a doctor this man Dr. Perrine was. Exactly where he received his medical education is uncertain. Some authorities state that it was in Philadelphia and others that it was in New York. From his early letters we know that Dr. Perrine was intensely interested in the practice and the science of medicine. The medical problem attracting him most was the tropical and subtropical fevers. Like our own John Gorrie and other practitioners of that period, he was thoroughly bewildered as to the classification of these. There was no scientific knowledge as to their etiology. It had been found out that cinchona bark cured certain of them. Dr. Perrine was fascinated with that knowledge and very early used quinine and cinchona bark rather freely. Besides being a practical clinician he also was diligent in recording and publishing his observations. The *Philadelphia Journal of Medicine and Physical Sciences* in 1826 contains an article by Dr. Perrine entitled, "Fever Treated With Large Doses of Sulphate of Quinine." Let me quote one case:

"Maria, a hearty, full grown black, sixteen years old, two months advanced in her second pregnancy, was attacked on the morning of October 8th, 1825, with vomiting, succeeded by fever, which intermitted at night. The next morning a chill introduced the fever, which continued through the day and night, and supervening chill was felt the ensuing morning of the 10th. Had taken on the 8th a small dose of salts; and on this morning, (of the 10th,) twelve grains of calomel, shortly after which she fainted. At eleven o'clock I found her pulse full, strong, and bounding, with severe pain in the loins, and with general symptoms of fever. An immediate bleeding of twelve ounces reinduced faintness, and its accompanying sweat. Eight grains of sulphate of quinine were then given; at 1 P. M. two hours afterwards, she was still perspiring freely, and took eight grains more. At 2 P. M. four purgative pills were given; at sunset four more. A blister was directed for the pain in the loins; an eight-grain dose of sulphate of quinine at bedtime; and another dose of eight grains two hours before light of the ensuing morning of the 11th. At 9 A. M. of that day, she was still sweating freely; the purgative pills had operated on her bowels during the night, yet

another dose of four pills was now given. At sunset, (Dr. Elliott with me), stated she had several watery passages; she was still perspiring, but her pulse was full and bounding. Bled her sixteen ounces; gave her a purgative, four pills; she fainted from exertion a few hours afterwards. At bedtime took eight grains of sulphate of quinine. Had copious, consistent evacuation from the bowels; was still perspiring; had a good appetite. I then left her, with the direction to take a purgative at the bedtime of that and the ensuing night. January, 1826. Has continued perfectly well."

Strange therapy this seems today; for a summary of the medication reveals that in three days the patient had been given one dose of salts, twelve grains of calomel, sixteen purgative pills, a blister to the loins, forty grains of quinine and two blood lettings, totaling twenty-eight ounces. And yet, the man who directed this treatment was so scientifically curious that he recounted in the same paper:

"My pulse in ordinary health is sixty in the minute. When at eighty, during the exacerbations of fever, I tried, on successive days, the effect of an eight-grain dose of sulphate of quinine on the frequency of my own pulse; the only variation in two hours after each experiment, was four beats less. My pulse was examined with an accurate timepiece every fifteen minutes. Some time afterwards I was attacked by an intermittent fever. At the commencement of a chill my pulse was eighty-eight, small and feeble; an eight-grain dose of sulphate of quinine was immediately taken; in fifteen minutes afterwards my pulse was seventy-six, fuller and firmer; in one hour and fifteen minutes, it was sixty-four and full. In an hour more I felt well enough to ride out."

He believed in quinine and no doubt was one of the first persons to urge strongly its use in intermittent fever. Medical literature contains other articles by Dr. Perrine on the subject of malaria and intermittent fevers. While in Yucatan he wrote a description of an epidemic of cholera which swept that land. So interested was he in the matter of medical publications that during most of his life he was a collaborator on the staff of the *Western Journal of Medicine* which was published in Louisville. He held this position at the time of his death.

When Dr. Perrine began to practice at Ripley, Illinois, his close friend was a Dr. Drake.

Though they were separated while Dr. Perrine lived in Mississippi and Yucatan, the friendship continued during the whole of Dr. Perrine's life. They both were collaborators on the *Western Journal of Medicine and Surgery*. In the 1840 edition appears an appreciation by Dr. Drake, entitled, "Death of Dr. Perrine." Drake writes:

"Philanthropy with him was a moving and active principle, nay it was carried to the verge of enthusiasm. He looked, I doubt not, upon the Seminoles, as misguided, but well-meaning, and that he could successfully appeal to their humanity. Hence his attempt at a parley and his melancholy fate.

"In several letters received at different times, Dr. Perrine has sought to impress on us his own conviction, that Tropical Florida is actually one of the healthiest spots on the continent." . . .

Dr. Perrine loved Florida. The East Coast lured him. His son, Mr. Henry E. Perrine, who visited Indian Key and the Perrine grant in 1876, no doubt expressed the feeling of his father and the feeling of all of us who know the beauty of the Southern East Coast; for Mr. Perrine in 1885 wrote:

"One never failing source of pleasure for me was the beauty of the Eastern sky before the rising of the sun. It needs the descriptive talent of a poet and artist to give you an adequate idea of those wonderful pictures in the clouds, which were always new and ever changing their forms. The delicacy and beauty of the colors with their various tints and shades were such as no earthly artist could rival; and I feel well repaid for early rising while enjoying the shifting scene."

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Jacksonville The Convention City

Over half a century before the Pilgrim Fathers landed at Plymouth Rock, official records were set up regarding the births and deaths¹ of white settlers in the vicinity of Jacksonville, Florida. It was here that the first white colony was established in the continental United States.² Here, also, the first battle was fought between white men on American soil; and it was here the first white child was born.

In 1562, Jean Ribault, seeking a location in the new world for a colony of Huguenots from France, discovered the St. Johns River, and left a marker of possession on the south bank of the river where the fishing village of Mayport stands today.³ Two years later, Rene de Laudonniere sailed from France in command of an expedition which brought the gallant group of over four hundred Huguenot colonists to their new homes. Laudonniere's expedition arrived at the St. Johns



Mayflower Hotel, Convention Headquarters.



Aerial View of Down-Town Jacksonville.

River in June, 1564, and the commander selected a location for the colony in a little plain formed by the westerly slope of St. Johns Bluff, on the south side of the river and six miles from its mouth. Ground was broken for the fort June 30, 1564, and the colony was named Fort Caroline in honor of Charles IX, the boy-king of France.

The adventure was ill-fated. Malaria dissipated the energies of the colonists and the King of Spain dispatched a punitive expedition to destroy them. Within fifteen months of its founding, the colony was wiped out in a welter of blood when the Spaniard, Pedro Menendez, with 400 armed men, attacked the fort on the morning of September 20, 1565, under cover of a storm which delayed the dawn. Menendez was tardy in halting the indiscriminate slaughter

which followed the surprise attack on the sleeping fort and only 70 of its occupants were spared, including an infant⁴ male child which had been born in the fort.

From such turbulent and sometimes tragic beginnings Jacksonville has evolved as a modern metropolis, dominating the commerce of the South Atlantic seaboard and controlling the distribution of trade in the southeastern United States.

Five different flags, betokening the rule of five different sovereignties, have rippled in the continuous ocean breezes which temper Jacksonville's climate with cool and invigorating delight. During different periods in the history of the locality of Jacksonville, Spain, France, England, the Confederacy, the Florida Republic and the United States of America have held and con-

Duval
County
Hospital
Jacksonville





St. Luke's
Hospital,
Jacksonville

tested dominion over this northerly outpost of the tropics.

Jacksonville is, primarily, an industrial center and a world port. Because it is the converging point at which airways, highways, railways and ocean waterways meet to first enter Florida's vast summer and winter playground, Jacksonville is also an important tourist center.

Five trunk line railroads bring an endless flow of traffic into Jacksonville's great passenger and freight terminals. From the mid-west the Dixie Highway and from the north the Atlantic Coastal Highway meet at Jacksonville, while the Old Spanish Trail traverses the colorful and romantic reach from Florida to the Pacific. An airport so good it merits a first-class rating with the United States Department of Commerce, owned and operated by the city, awaits air travelers. Hundreds of planes touch annually at this airport which has become the hub of southern air travel. But whether visitors come by road, sea or air, their first impression of Jacksonville is one of a hustling, busy metropolis with tall buildings, fine stores and shops, splendid and comfortable homes and many factories. Everywhere one turns is a

note of tropical loveliness—the verdant charm of Florida.

Jacksonville is a city of beautiful homes, of spacious hotels and apartments . . . a city in which Florida's brilliant sports and diversions are at their height. It is a good place for work—a splendid place for play. Here Florida's climate is at its best the whole year 'round, genial throughout the winter time and gentle in summer.

Many of Florida's most attractive resorts are within easy reach of Jacksonville. St. Augustine, for instance, America's most ancient city, is easily reached within an hour's drive over a state and national highway. At St. Augustine, in a quiet, old-world atmosphere, the visitor may look over Fort Marion's frowning walls, the Fountain of Youth, the Ancient City Gates, the oldest house in America, the slave market and other colorful attractions. On the return trip the visitor may come by way of the Shands Bridge through Green Cove Springs and lovely Orange Park.

Historic Fernandina, once the rendezvous of the raiders of the Spanish Main, is another short motor jaunt from Jacksonville. Caches of pirate

St. Vincent's
Hospital,
Jacksonville





Jacksonville's Beaches—the South's Popular Summer Resort

gold are still found occasionally on Amelia Island, where buccaneers of old careened their ships and held their revels. Fort Clinch, the white-winged shrimp fleet, the many other sights await the visitor in Fernandina.

Jacksonville's incomparable beaches should also be seen by every visitor. Matchless beaches sweep in a great crescent from Mayport to St. Augustine, more than thirty miles away. At low tide the beach is a perfect motor highway, six hundred feet wide. At Mayport, a tiny fishing village, is the Ribault Monument, commemorating the landing of the first colonists on North American soil in the year 1562. A broad, inviting boulevard takes you to Jacksonville's beaches

. . . which are just eighteen miles from the heart of the city.

There is an almost bewildering abundance of choices of pleasure trips open to the visitor to Jacksonville, those which have been named merely indicate a few of the high-spots which may be reached within an hour or two by automobile from Jacksonville. Further afield are the glorious resorts of Florida's incomparable East Coast and Sarasota. Ft. Myers, St. Petersburg, Tampa, Clearwater and countless other beauty spots on the West Coast facing the Gulf. The ridge section of the hinterland, the lake region, fishing and hunting grounds in practically every section, all have unusual delights to offer whether the guest comes for a hurried visit or a leisurely stay. And he will find that all is good, and very good!



Union Terminal Station at Jacksonville

¹Statistical record of deaths in the Meras memorial. For translation see "Pedro Menendez de Aviles," by Jeannette Thurber Conner, Florida State Historical Society, 1923.

²"Fort Caroline," by T. Frederick Davis, Florida Historical Society Quarterly, October, 1933.

³For Laudonniere's and other French accounts, see Hakluyt's translations.

⁴Record of birth in report made by Menendez to the Spanish King, Oct. 15, 1565; Averette translation in "The Unwritten History of Old St. Augustine."

PROGRAM

of the

SIXTY-FIRST ANNUAL MEETING

of the

FLORIDA MEDICAL ASSOCIATION, Inc.

TO BE HELD AT JACKSONVILLE, FLORIDA

April 30th, MAY 1st, and 2nd, 1934

INFORMATION

Information desk will be located in the lobby of the headquarters hotel, The Mayflower Hotel, with continuous service throughout the meeting. All members will be required to register and secure identification badges before attending any of the sessions. Guests and ladies are requested to register. Tickets for the banquet, Tuesday evening, May 1st, may be obtained at the registration desk.

HOTELS

Mayflower Hotel—Convention headquarters.

MINIMUM RATES (European Plan)

	Single	Double
George Washington	\$3.00	\$5.00
Carling	2.50	4.00
Mayflower	2.50	4.00
Windsor	2.00	4.00
Seminole	2.00	4.00
Burbridge	2.00	3.00
Windle	1.75	2.50

TECHNICAL EXHIBITS

Technical exhibits will be located in booths in the lobby of the Mayflower Hotel.

The technical exhibits have a real scientific value and physicians who wish to keep abreast of the times and know the latest in drugs and medical appliances should spend some time with these exhibits. It will be surprising the amount of useful information that can be procured at these exhibits. Many have nothing for sale, the representatives of the firms being there to give the latest information regarding their products. Those who have items for sale will gladly give information whether there is a purchase or not. Be sure to register your name with the various representatives who are exhibiting.

The following firms have arranged for exhibits at the Jacksonville meeting:

American Optical Co.	C. V. Mosby Co.
H. G. Fischer & Co., Inc.	Foremost Dairies, Inc.
Gerber Products Division	National Drug Co.
C. B. Fleet Co.	General Electric X-Ray Corp.
Keleket X-Ray Co.	E. R. Squibb & Sons
Mead Johnson & Co.	Surgical Supply Co.
Dinsmore Dairies	Everhart Surgical Supply Co.

ENTERTAINMENT

Golf Tournament will be held at Timuquana Country Club, Tuesday, May 1. All golfers are earnestly urged to attend.

All members playing in tournament are asked to bring their handicaps signed by their club secretary or club professional. No handicap of over 27 will be allowed.

Prizes will be offered as follows:

- 1st prize: Orlando Cup (low net score).
- 2nd prize: Runner-up (2nd low net score).
- 3rd prize: Low gross medal score.
- 4th prize: Consolation.

A golf luncheon will be held at Timuquana Country Club at 12:30 p.m., Tuesday, May 1. It is hoped to have a large attendance at this luncheon as it will be the first meeting held within the Association for golfers only.

Greens fees (For guests showing F.M.A. Badges):

- Municipal course—free.
- Florida Country Club—\$0.50.
- Timuquana Country Club—\$1.00.

At this meeting of the Florida Medical Association, the question of forming a permanent golf association will be discussed. It has been suggested that several district tournaments could be held during the year, leading up to the grand finale at the State Convention. If the interested members think this is feasible, we hope it can be put over.

Fishing trips. (Arranged by Dr. A. H. Wilkinson.)

Monday, April 30th

- 8:00 p.m. Informal Smoker (stag). Buffet Supper preceded by swimming and recreation at Florida Yacht Club.

Tuesday, May 1st

- 7:30 p.m. Association Dinner. Mayflower Hotel Roof Garden. Dr. John J. Tigert, President University of Florida, guest speaker. Tickets (\$2.50) may be obtained at registration desk. Following the dinner, there will be dancing.

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FIRST GENERAL SESSION

Monday, April 30th, 1:30 P. M.

Roof Garden.

Call to order, Robert B. McIver, Chairman of Convention Committee.

Invocation, The Reverend Newton Middleton, rector, St. John's Episcopal Church, Jacksonville.

Introduction of Georgia Delegates, Dr. A. G. Fort, Dr. J. M. Smith.

Address of President, William M. Rowlett, Tampa. Announcements.

President Rowlett in the Chair.

Report of officers:

Secretary-Treasurer-Editor, Shaler Richardson, and Business Manager, Stewart Thompson.

Executive Committee, Leigh F. Robinson.

Committee on Legislation and Public Policy, S. E. Driskell.

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Committee on Post-Graduate Work, T. Z. Cason.

Committee on Cancer Control, Gerry R. Holden.

Committee on Medical Economics, Herman Watson.

Special Committee Reports.

SCIENTIFIC ASSEMBLIES

Roof Garden.

Committee on Scientific Work: Herbert L. Bryans, Pensacola; Roncie R. Duke, Tampa; Edward Jelks, Jacksonville.

Attention is called to the following By-Laws:

"All papers read before the Association shall be its property. Every paper shall be deposited with the Secretary when read."

"No address or paper before the Association, except those of the President and Orator, shall occupy more than fifteen minutes in its delivery, and no member shall speak longer than five minutes, or more than once on any one subject."

Plans have been made to show lantern slides, microscopical slides, and moving picture films. Essayists wishing to demonstrate their papers with either lantern slides or films should communicate with Dr. W. M. Shaw, Jacksonville, Chairman of Committee in charge.

FIRST SCIENTIFIC ASSEMBLY

Monday, April 30th, 3:00 P. M.

Roof Garden.

1. "Treatment of Upper Urinary Tract Infections," E. Clay Shaw, Miami.

Discussion of causative bacteria. Modes of infections and prevention. Importance of foci in prostate and seminal vesicles, in teeth, tonsils and intestinal tract. The entero-renal syndrome and bacilluria unassociated with pyuria. Medical treatment with discussion of urinary antiseptics. The Ketogenic diet. Cystoscopy and indwelling catheter. Conditions requiring surgery.

Discussion: Louis Orr, Orlando;
E. S. Gilmer, Tampa;
R. W. Blackmar, Jacksonville.

2. "Hypothyroidism Without Myxedema," Nathaniel L. Spengler, Tampa.

This study confined to use of one glandular product. A typical syndrome in mothers, infants and children is given. The facts have been proved by therapeutic tests based on thyroid tolerance. If symptoms respond to thyroid therapy, the patient is classed as hypothyroid without myxedema.

Discussion: T. Z. Cason, Jacksonville;
Thomas E. Buckman, Jacksonville.

3. "Ophthalmology and Its Relation to General Medicine and Surgery," Nelson M. Black, Miami.
A brief outline of the inter-relationship between ophthalmology and the special departments into which the field of medicine is today divided.

Discussion: Shaler Richardson, Jacksonville;
Bascom H. Palmer, Miami.

FIRST MEETING OF HOUSE OF DELEGATES

Monday, April 30th, 5:00 P. M.

Assembly Hall (10th Floor)

President Rowlett in the Chair.

Roll Call and Seating of Delegates.

Adoption of Minutes as published in May, 1933, Journal.

Election of one delegate to A. M. A. meeting (one-year term) and one delegate and one alternate for two-year term.

Selection of meeting place of Association for 1935.

Consideration of proposed amendment to Constitution.

Reading of Resolutions.

New Business.

Announcements.

Adjournment.

SECOND SCIENTIFIC ASSEMBLY

Tuesday, May 1st, 9:00 A. M.

Roof Garden.

4. "Surgical Management of Thyrotoxicosis," John S. Helms, Jr., Tampa.

History. Etiology: unknown. Diagnosis: signs, symptoms, metabolism, blood iodine. Preoperative treatment including intravenous administration of iodine and dangers. Technique of operation. Anesthetic; preoperative sedation, local and gas anesthesia. Complications: injuries to nearby structures. Results: early and permanent. Recurrences: causes of.

Discussion: Frederick J. Waas, Jacksonville;
James M. Hoffman, Pensacola.

5. "Arthritis" (lantern slides), Julian E. Gammon, Jacksonville.

Causes. Classification. Pathological changes. Treatment. Results of treatment.

Discussion: W. M. Shaw, Jacksonville;
Clayton E. Royce, Jacksonville.

6. "Treatment of Agranulocytosis with Yellow Bone Marrow" (lantern slides), M. Jay Flipse, Miami.
Brief review of previous methods of therapy with discussion of mortality. Description of method of treatment with yellow bone marrow. Report of several cases of benign and malignant agranulocytosis under treatment with yellow bone marrow.

Discussion: T. Z. Cason, Jacksonville;
John W. Snyder, Miami.

SECOND GENERAL SESSION

Tuesday, May 1st, 10:30 A. M.

Roof Garden.

President Rowlett in the Chair.

Address (by invitation), "Readjustments in Surgery and Medicine," Howard A. Kelly, Baltimore, Md.

THIRD SCIENTIFIC ASSEMBLY

Tuesday, May 1st, 2:00 P. M.

Roof Garden.

7. "Fractures of the Elbow" (lantern slides), Arthur H. Weiland, Coral Gables.

Anatomical consideration. Classification and characteristic displacements in each. Type of treatment for each fracture with stress on the accuracy of replacement of fragments and the importance of follow-up treatment. Case presentations.

Discussion: F. L. Fort, Jacksonville;
Prescott Le Breton, St. Petersburg.

8. "A Perineorrhaphy," Gaston H. Edwards, Orlando.
History of Perineorrhaphies. Indications. Case selections. Description of operation and results.

Discussion: Gerry R. Holden, Jacksonville;
William M. Rowlett, Tampa.

9. "Surgical Treatment of Pulmonary Tuberculosis" (lantern slides), Kenneth A. Morris, Jacksonville.
Principles involved in surgical treatment. Phrenic exeresis. Extrapleural thoracoplasty. Presentation of cases.

Discussion: Louie Limbaugh, Jacksonville;
J. Knox Simpson, Jacksonville.

10. "Diagnosis and Surgical Management of Gastric and Duodenal Lesions" (lantern slides), Bundy Allen and John R. Boling, Tampa.

Gastro-intestinal and duodenal lesions from the clinical and x-ray diagnosis. A general discussion of the surgical management of various types of lesions.

Discussion: W. M. Shaw, Jacksonville;
L. B. Dickerson, Clearwater.

11. "The Roentgenologist as a Consultant in Acute Abdominal Conditions" (lantern slides), O. O. Feaster, St. Petersburg.

Value of roentgenologist as a medical consultant and not a technician. Early diagnosis in perforated ulcer; diverticula; stone in ureter; subdiaphragmatic abscesses; gunshot wounds; acute intestinal obstruction. Patient frequently saved delay of twelve to forty-eight hours before operation.

Discussion: Frederick K. Herpel, W. Palm Beach;
R. H. Knowlton, St. Petersburg.

12. "Intestinal Obstruction," Joseph S. Stewart, Jr., Miami.

Statistical study of all cases occurring at Jackson Memorial Hospital during past four years. Need of early diagnosis as shown by difference in mortality figures for cases of early and late operations. Cause of death in this disease. Case reports illustrating various points in treatment.

Discussion: Walter Jones, Miami;
Frederick J. Waas, Jacksonville.

SECOND MEETING OF HOUSE OF DELEGATES

Tuesday, May 1st, 5:00 P. M.

Assembly Hall (10th Floor)

Unfinished business.

FOURTH SCIENTIFIC ASSEMBLY

Wednesday, May 2nd, 9:00 A. M.

Roof Garden.

13. "Fibroid Tumors," Lloyd J. Netto, W. Palm Beach.
Historical review. Present-day conceptions of etiology. Pathology and processes of degeneration. Symptoms and diagnosis. Treatment: indications for different types and comparison of values of radiation and surgery. Myomectomy and hysterectomy. Summary.

Discussion: Leigh F. Robinson, Ft. Lauderdale;
M. C. Wilson, Miami.

14. "Tuberculin in the Treatment of Arteriosclerosis" (lantern slides), W. H. Spiers, Orlando.
Certain physical characteristics found in patients suffering from tuberculosis which led to experimental treatment of arteriosclerosis with tuberculin. Report of 100 cases wherein this treatment was used.
Discussion: T. Z. Cason, Jacksonville;
H. Mason Smith, Tampa.
15. "Recent Progress in Aviation Medicine," Lieut. Commander Louis Iverson, Pensacola.
Carbon monoxide poisoning in aeroplanes and the psychological aspects in the selection of men.
Discussion: Ralph Greene, Jacksonville.
16. "Clinical Nature of Malignancies and the Principles of Treatment," J. S. Turberville, Century.
Discussion of neoplasms in general and the inadequacy of the inclusion theory of their origin. Obscurity of origin of all neoplasia is accentuated. Principles of treatment of cancer based on present knowledge. A short statistical review of some of the writer's own work with comments on the groups included. Summary of most important considerations of diagnosis and treatment.
Discussion: J. M. Hoffman, Pensacola;
Gerry R. Holden, Jacksonville.
17. "Suggestions as to the Care of Brain Injury Cases," Ralph Greene, Jacksonville.
Graphic display showing every fatal automobile accident case in Florida for period of one year. Suggestions for treatment of all cases at or near point of injury.
Discussion: Dan Hardie, Miami;
Edward Jelks, Jacksonville.
18. "Action of Quinine on Malaria," Paul Eaton, Jacksonville.
A study of the action of quinine on malaria based on a consideration of the age-group characteristics of the parasite population. Blood films made at various parts of the malaria cycle show widely differing proportions of parasites in the various stages of development. Proportion of parasites maturing at the time of chill. Effect of quinine on plasmodia.
Discussion: Thomas E. Buckman, Jacksonville;
Clayton E. Royce, Jacksonville.

THIRD GENERAL SESSION

Wednesday, May 2nd, 12:00 Noon

Roof Garden.

President Rowlett in the Chair.
Unfinished Business.
New Business.
Dr. Homer Pearson escorted to the Chair as new President.
Presentation of Past-President's Button to Dr. W. M. Rowlett.
Election of President-elect.
Election of First Vice-President.
Election of Second Vice-President.
Election of Third Vice-President.
Election of Secretary-Treasurer.
Adjournment.

PROGRAM FOR WOMEN

LOCAL COMMITTEE ON ARRANGEMENTS

Mrs. Frederick J. Waas, Chairman, assisted by members of Duval County Medical Auxiliary.

Monday, April 30th

Mayflower Hotel.

- 4:00 p.m. Executive Board meeting, room No. 1012.
8:30 p.m. Microbe Party and Informal Musicales. Mayflower Hotel Assembly Hall (10th floor).
Hostesses: Officers and members of Duval County Medical Auxiliary.

Tuesday, May 1st

Mayflower Hotel.

- 9:30 a.m. General Session, Assembly Hall (10th floor).
1:00 p.m. Luncheon at Estate of Dr. and Mrs. S. A. Morris, in Granada, South Jacksonville, followed by a motor ride to the beaches.
4:00 p.m. Tea at St. Vincent's Hospital. Hostesses: Officers and Members of St. Vincent's Hospital Auxiliary.
7:30 p.m. Association Dinner. Mayflower Hotel Roof Garden.

PROGRAM OF THE FIFTEENTH ANNUAL MEETING OF THE FLORIDA RAILWAY SURGEONS' ASSOCIATION

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Legislative and Public Policy—L. M. Anderson, Chairman, Lake City; Fred H. Albee, Sarasota; T. M. McDuffee, Manatee; Frederick J. Waas, Jacksonville; William R. Warren, Key West.

Necrology—T. M. Rivers, Chairman, Kissimmee; R. R. Duke, Tampa; W. H. Grace, Ft. Myers; C. H. Kirkpatrick, Arcadia.

Monday, April 30th, 10:00 A. M.

Mayflower Hotel

Assembly Hall (10th Floor)

- Call to Order by President, Jack Halton.
Invocation, The Reverend J. L. Rosser, pastor, Riverside Baptist Church, Jacksonville.
Address of Welcome, Frederick J. Waas, Jacksonville.
Response, T. M. McDuffee, Manatee.
Address (by invitation), "The Function of a Railway Medical Department," Robert B. Slocum, Supt. and Medical Director, A. C. L. Ry. Co.
President's Address, Jack Halton, Tampa.
"Symbiosis," A. R. Beyer, Tampa.
"The Reminiscences of a Railway Surgeon," Henry E. Palmer, Tallahassee.
Business Session.
Election of Officers.

PROGRAM OF THE
THIRD ANNUAL SPRING MEETING OF THE
FLORIDA RADIOLOGICAL SOCIETY

OFFICERS

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Vice-President, Frederick K. Herpel....W. Palm Beach
Secretary-Treasurer, W. M. Shaw.....Jacksonville

Monday, April 30th

Mayflower Hotel, Room 1014

10:00 a.m. Radiological Diagnostic Conference.
1:00 p.m. Luncheon.
6:30 p.m. Supper at George Washington Hotel Club
Room, followed by Business Meeting.

REGULAR QUARTERLY MEETING OF THE
FLORIDA SOCIETY OF DERMATOLOGY AND
SYPHILOLOGY

Monday, April 30th

Duval County Hospital

9:30 a.m. Clinical Session.

ALUMNI AND FRATERNITY LUNCHEONS

Tuesday, May 1st

George Washington Hotel.

12:30 p.m. Emory Medical Alumni Association.
12:30 p.m. Jefferson Medical College Alumni.



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1927—Dr. John A. Simmons, Arcadia.
1928—Dr. F. J. Waas, Jacksonville.
1929—Dr. Henry C. Dozier, Ocala.
1930—Dr. Julius C. Davis, Quincy.
1931—Dr. Gaston H. Edwards, Orlando.
1932—Dr. Gerry R. Holden, Jacksonville.
1933—Dr. William M. Rowlett, Tampa.

*Deceased.



Driving Beach Jacksonville.

The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0377

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HOUSE OF DELEGATES

One delegate for each twenty members, or major fraction thereof, is allowed each component society as its representation in the House of Delegates. The basis used in determining the number of delegates to which a society is entitled is the number of paid members of that society whose 1934 dues have been paid to the treasurer of the State Association. Members whose dues for 1934 have not been paid cannot be counted in seating delegates. Each society should select its delegate, or delegates, with care as there undoubtedly will be some very important matters brought up before the House of Delegates.

The Executive Committee took action at a recent meeting, requiring delegates to have credentials from the officers of their component societies. Each delegate is requested to present his credentials at the registration desk immediately upon arrival in Jacksonville. In this way, the roster of delegates may be checked and unnecessary confusion avoided in seating the delegates when the meeting opens. Printed forms to be used as credentials have been placed in the hands of the secretary of each component society. Each delegate should, therefore, secure his credentials before leaving home.

All meetings of the House of Delegates will be held in the Assembly Room on the tenth floor of the Mayflower Hotel. The first meeting is scheduled for Monday, April 30, at 5:00 p. m. All delegates will be seated in a reserved space entirely separate from any members who may wish to attend the meeting as visitors.

STATE NEWS ITEMS

President W. M. Rowlett took the first week of the month off and visited the officials of the State and local Societies in South Florida and the East Coast. On the evening of the 6th he was the guest of the Lee County Medical Society; Saturday evening the 7th, of the Dade County Medical Society; and the morning of the 8th, the Palm Beach Medical Society. He reports much enthusiasm in the sections visited, over the coming meeting of the State Association.

* * *

Dr. Walter C. Jones of Miami recently attended the Southeastern Surgical Congress at Nashville, Tennessee, where, by invitation, he presented a paper on "The Mechanics of Perineal Repair."

Dr. Kenneth A. Morris of Jacksonville announces the removal of his offices from the Professional Building to 237 West Duval Street.

* * *

Dr. M. A. Lischkoff of Pensacola attended the meeting of the American Laryngological, Rhinological and Otological Society in Charleston, April 3-5.

* * *

The grandmother of Dr. George A. Dame and Dr. Leland H. Dame of Inverness died March 27, at the age of 98 years. She was Mrs. George A. (Sarah Anne) Dame of Homerville, Georgia.

* * *

Dr. T. H. D. Griffiths, surgeon detailed to Florida to direct the malaria control studies of the State Board of Health, has returned from the Pan-American Convention tour of Central and South America where he represented the U. S. Public Health Service.

* * *

Dr. E. C. Swift of Jacksonville announces the removal of his offices from the Riverside Hospital to the Medical Arts Building, 1022 Park Street.

* * *

Dr. H. B. Haisfield of Pensacola attended the Southeastern Surgical Congress recently held in Nashville, Tennessee.

* * *

Dr. Horace Day of Orlando, a member of the staff of Governor Sholtz, spent March 15th at Miami, where he attended the Governor's Day celebration.

* * *

Dr. T. F. Jackson of Dade City died on March 21st. For many years he had been an active member of the Pasco-Hernando-Citrus County Medical Society, having served that organization both as president and secretary-treasurer.

* * *

Dr. George Dame of Inverness was a visitor in Jacksonville recently where he attended a meeting of the Royal and Select Masters of the Florida Masonic Group. While in Jacksonville Dr. Dame visited the offices of the State Board of Health and the Florida Medical Association.

* * *

The many friends of Dr. M. P. DeBoe of Miami will be glad to learn that he has recovered from his recent illness and resumed his practice.

EUSTIS RANDOLPH MARSHBURN

On Saturday, March 25, at noon, death came to Dr. E. R. Marshburn, prominent physician of Marianna, after an extended illness, at the age of 47 years.

Impressive services were held for Mr. Marshburn at the home Saturday evening at 9 o'clock, with Dr. Milo Massey of the First Baptist Church officiating. After this service the family, with friends, left with the body for Lake Butler, where services were conducted Sunday afternoon at 3:00 o'clock from the home of Mrs. Zacharias, a sister of Dr. Marshburn.

Dr. Marshburn was a native of North Carolina, coming to Lake Butler with his parents when a boy. In 1914 he was graduated with honors from Emory University School of Medicine. Returning to Florida he engaged in general practice in Crestview, later going to Florida State Prison at Raiford, where he was in charge of the medical department at that institution. He was four years at the state institution in Raiford, when he was placed on the staff of the State Hospital in Chattahoochee.

At the time of his death, Dr. Marshburn was district health officer, working under the State Board of Health.

Surviving are Mrs. Marshburn, the widow; three daughters, Louise, Mona Claire and Betty, and two sons, George Wilbur and Edward Marshburn.

Drs. J. S. McEwan and G. H. Edwards of Orlando attended a meeting of the surgeons of the A. C. L. Railway system held in Tampa, February 24.

* * *

Dr. J. C. Davis of Quincy was a visitor in Jacksonville during the month of March. He visited the business office of the Association while in the city.

* * *

Dr. F. W. Foxworthy of Miami was recently awarded the Congressional Medal for bravery during the Spanish-American War.

* * *

Born, to Dr. and Mrs. E. B. Hardee of Vero Beach, a son, Wellford Estes, on February 28th.

On August 31, 1933, the Tampa Eye, Ear, Nose and Throat Society was founded. Charter members of this organization are Dr. H. J. Blackmon, Dr. G. W. Brown, Dr. J. C. Chandler, Dr. R. R. Duke, Dr. S. B. Forbes, Dr. W. B. Hopkins, Dr. R. Jefferson, Dr. B. W. Lowry, Dr. A. Martorell, Dr. W. Patterson, Dr. J. W. Taylor, Dr. C. Vaughn. Dr. B. W. Lowry was elected president, Dr. G. W. Brown, secretary-treasurer. Meetings are held at the Tampa Municipal Hospital on the third Tuesday of every other month.

The first scientific meeting of the society was held January 16, 1934. The principal subject for discussion was a "Symposium on Glaucoma Simplex." Dr. H. J. Blackmon discussed the diagnosis of glaucoma, Dr. Joseph Taylor the medical treatment of glaucoma and Dr. R. R. Duke the surgical treatment of glaucoma.

The second meeting of the society, on February 14, had as its guest Dr. W. B. Lancaster of Boston. Dr. Lancaster's subject was "Certain Disturbances of Binocular Vision and Their Treatment," illustrated by motion picture films and slides. Those present were: Dr. Blackmon, Dr. Brown, Dr. Chandler, Dr. Duke, Dr. Forbes, Dr. Hopkins, Dr. Jefferson, Dr. Lowry, Dr. Martorell, Dr. Patterson, Dr. Taylor and Dr. Vaughn, Drs. Smith, Cline and Tillis of Lakeland, Dr. Nichols of Clearwater. All doctors interested in this specialty are cordially invited to attend future meetings.

ANNUAL MEETING OF TUBERCULOSIS AND HEALTH ASSOCIATION

The Florida Tuberculosis and Health Association is planning its annual meeting in conjunction with the annual meeting of the Florida Medical Association in Jacksonville.

The meetings are being held the same days but do not conflict so that physicians may attend sessions of both organizations, having to leave their homes and practice but once.

The Florida Tuberculosis and Health Association is a voluntary organization supported by the sale of Christmas seals and designed to supplement the activities of the official health agencies in the state. Its purpose is to cooperate with the official agencies and physicians in the education of the public to early diagnosis and thereby early recovery from all forms of tuberculosis. It is designed to do work in pioneer fields of education, experimentation and demonstration.

Its program, with that of its affiliated groups, includes health education, case-finding, clinical service, nursing service, preventoria and legislation.

Its main objective at the present time is a state sanatorium—a place where the moribund cases may go to die in peace and comfort and where the incipient case may go for treatment and recovery; a place from which will emanate methods for the prevention of infection, information for the education of the patient, training for doctors and nurses, economic rehabilitation for those patients who can be restored to even partial working efficiency, where medical and social research can be effected and where tuberculosis in children may be prevented.

The sessions to be held in Jacksonville will give the physician an opportunity to hear papers on several phases of this control program as it relates to his private practice and to increase his scientific knowledge of this disease. It will give him the place of the tuberculosis organization in the community as it relates to public health, individual health and to himself.

COMPONENT COUNTY SOCIETIES

COLUMBIA COUNTY MEDICAL SOCIETY

COLUMBIA COUNTY MEDICAL SOCIETY STANDS 100% PAID FOR 1934 AS IT DID FOR 1933. THIS SOCIETY, HEADED BY DR. L. M. ANDERSON, AS PRESIDENT, DR. R. B. HARKNESS, VICE-PRESIDENT AND DR. T. H. BATES, SECRETARY, HAS A MEMBERSHIP WHICH IS KEENLY INTERESTED IN ALL PHASES OF ORGANIZED MEDICINE.

DADE COUNTY MEDICAL SOCIETY

The following program was presented at the meeting of the Dade County Medical Society, held in the Huntington Club Rooms, Miami, Friday evening, April 6:

"A Case of Angina Pectoris Treated by X-radiation," J. H. Lucinian.

"Symposium on Cancer of the Breast" (lantern slides).

1. Diagnosis and Treatment, Walter C. Jones.
2. Pathologic Viewpoint, Iva C. Youmans.
3. Radiologic Aspect, Frazier J. Payton.

The Dade County Medical Society is growing by leaps and bounds. As this Journal goes to

press, the total membership of the society is 193. Dues for 1934 are coming in fast and it would be no surprise if the society reports 100% paid before the time of the annual meeting.

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

The DeSoto-Hardee-Highlands County Medical Society held its regular monthly meeting at the Jacaranda Hotel, Avon Park, March 13th at 8:00 p. m. Drs. Bundy Allen, Leland Carlton and S. H. Etheredge of Tampa and Dr. Fiske of Philadelphia were invited guests at this meeting. Dr. Carlton read a very interesting paper on "The Economic Problem of Arthritis," which was discussed by Drs. Fiske, Etheredge and Peacock.

DUVAL COUNTY MEDICAL SOCIETY

The Duval County Medical Society held its regular meeting Tuesday evening, April 3, at the Mayflower Hotel. The following symposium on arthritis constituted the scientific program:

1. Arthritis: Classification, etiology and treatment, Julian E. Gammon.
2. Arthritis from the Orthopedic Standpoint, Frank L. Fort.
3. Arthritis from the X-Ray Standpoint, W. M. Shaw.

The discussion was opened by Drs. Edward Jelks and B. F. Woolsey.

The Duval County Medical Society reports progress in its plans for entertaining the State Association. It promises plenty of recreation along with the scientific side of the meeting.

HILLSBORO COUNTY MEDICAL SOCIETY

THE HILLSBORO COUNTY MEDICAL SOCIETY IS, TO DATE, THE LARGEST SOCIETY WITH A 100% PAID-UP MEMBERSHIP. THIS SOCIETY IS PUTTING OVER A VERY SUCCESSFUL CAMPAIGN TO BRING BACK INTO ITS MEMBERSHIP DOCTORS WHO HAVE, FOR ONE REASON OR ANOTHER, DROPPED OUT DURING THE PAST FIVE OR SIX YEARS. THERE ARE ALSO A FEW ELIGIBLE DOCTORS IN THAT DISTRICT WHO HAVE NOT FORMERLY BEEN AFFILIATED WITH ORGANIZED MEDI-

CINE, WHO WILL NO DOUBT JOIN THE RANKS DURING THE YEAR. THE RE-NEWED INTEREST AND ENTHUSIASM OF THIS SOCIETY ARE OUTSTANDING.

MANATEE COUNTY MEDICAL SOCIETY

THE MANATEE COUNTY MEDICAL SOCIETY HAS "GONE OVER THE TOP" FOR 1934. 100% OF MEMBERSHIP DUES WERE RECENTLY RECEIVED FROM DR. W. D. SUGG, TREASURER. DR. A. Q. ENGLISH OF PALMETTO IS PRESIDENT OF THIS SOCIETY AND DR. C. W. LARRABEE, BRADENTON, VICE-PRESIDENT.

MONROE COUNTY MEDICAL SOCIETY

THE MONROE COUNTY MEDICAL SOCIETY, THOUGH SMALL IN MEMBERSHIP AND RATHER ISOLATED IN LOCATION, MAY WELL BE PROUD OF ITS 100% PAID RECORD FROM YEAR TO YEAR. DR. HARRY C. GALEY IS PRESIDENT AND DR. WILLIAM R. WARREN, SECRETARY. DR. RICARDO FINA WILL REPRESENT THE SOCIETY AS DELEGATE AT THE NEXT CONVENTION.

ORANGE COUNTY MEDICAL SOCIETY

The Orange County Medical Society gave a buffet supper Monday evening, March 12th, at the Orlando Country Club in honor of Doctor Paul D. White of Harvard Medical College, Boston, Mass. Dr. White delivered a very interesting and instructive address on "Our Present Viewpoint of Heart Disease." The majority of the members of the society were present. Invitations had been sent out to physicians of central Florida to attend the lecture to which thirty-seven responded by attending the meeting.

At a recent meeting of the Orange County Medical Society the following resolutions were passed regarding the deaths of Dr. Cole Carroll and Dr. Cyril J. Marshall:

"DR. COLE CARROLL .

"Whereas, Divine Providence in Its infinite wisdom has seen fit to call Dr. Carroll to the Great Unknown and, whereas, by his untiring

devotion to the practice of medicine, and his continued sacrifices in the interest of charity, he endeared himself to his community and members of the Orange County Medical Society, we do feel deeply the loss of our esteemed fellow physician; therefore be it

"RESOLVED, That the Orange County Medical Society express its sorrow in the passing of Dr. Cole Carroll; that this resolution be entered upon a page in the minutes of this society, and a copy be sent to the surviving members of his family, and that the same be published in the Journal of the Florida Medical Association.

"W. H. SPIERS, M.D., Chairman;
C. D. CHRIST, M.D.,
THOMAS MCBRIDE, M.D."

DR. CYRIL J. MARSHALL

"Whereas, due to long continued ill health, our fellow member was suddenly called to the Great Beyond to which he had no fear of entering; he had been a faithful and loyal member of our County Society since he came to Florida in 1911; he was also honorable in his business and professional relations and never turned down a call to relieve suffering humanity among the needy, when it was in his power to administer his art to them; Dr. Marshall did an untold amount of charity work in his line that few people know of; this Society has lost a friend of organized medicine and a competent physician in his special line; therefore be it

"RESOLVED, That the Orange County Medical Society express its sorrow in the passing of Dr. Cyril Justin Marshall; that this resolution be entered upon a page in the minutes of this Society, and a copy be sent to the surviving members of his family, and that the same be published in the Journal of the Florida Medical Association.

"C. D. CHRIST, M.D., Chairman;
W. H. SPIERS, M.D.,
HEWITT JOHNSTON, M.D."

PALM BEACH COUNTY MEDICAL SOCIETY

THE PALM BEACH COUNTY MEDICAL SOCIETY HAS STEPPED TO THE FRONT. THIS SOCIETY IS NOW NEXT TO THE LARGEST IN SIZE WITH A 100% PAID MEMBERSHIP. A NUMBER OF DOCTORS WHO FORMERLY WERE MEMBERS OF THIS SOCIETY HAVE BEEN REINSTATED AND THE TREAS-

URER, DR. FREDERICK K. HERPEL, REPORTS THAT A CAMPAIGN IS BEING CONDUCTED TO BRING INTO THE SOCIETY EVERY ETHICAL DOCTOR OF THE DISTRICT. THE MEMBERSHIP NOW STANDS AT 35.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL
SOCIETY

Dr. and Mrs. P. J. Hudson entertained the members of the Pasco-Hernando-Citrus County Medical Society at a fish fry and oyster supper on the point at Crystal River, Thursday evening, March 8. After the dinner, the Society met at the City Hall in Crystal River for its regular scientific session. Dr. Jack Halton of Sarasota and Dr. H. C. Dozier of Ocala were invited guests of the Society. Dr. Halton spoke on "The Office Treatment of Rectal Diseases," using lantern slides as illustrations.

SARASOTA COUNTY MEDICAL SOCIETY

THE SARASOTA COUNTY MEDICAL SOCIETY HAS JUST REPORTED 100% OF MEMBERSHIP DUES PAID FOR 1934. THE OFFICERS OF THIS SOCIETY ARE: J. C. PATTERSON, PRESIDENT; A. O. MORTON, VICE-PRESIDENT, AND J. E. HARRIS, SECRETARY-TREASURER.

SEMINOLE COUNTY MEDICAL SOCIETY

SEMINOLE COUNTY MEDICAL SOCIETY, BECAUSE OF ITS SPLENDID RECORD FOR A PERIOD OF YEARS, IS A SOCIETY WHICH JUST NATURALLY IS EXPECTED TO COME IN 100% PAID. THE EXPECTED HAS HAPPENED AND THIS SOCIETY IS NOW ON THE HONOR ROLL FOR 1934.

TAYLOR COUNTY MEDICAL SOCIETY

TAYLOR COUNTY MEDICAL SOCIETY HAS REACHED THE TOP. THE ROSTER OF THE SOCIETY AND 100% OF MEMBERSHIP DUES FOR 1934 WERE RECENTLY RECEIVED FROM ITS SECRETARY. THE OFFICERS SERVING FOR THIS YEAR ARE: PRESIDENT, W. J. BAKER OF FOLEY; VICE-PRESIDENT, J. L. WEEKS, PERRY; SECRETARY-TREASURER, C. A. O'QUINN, PERRY.



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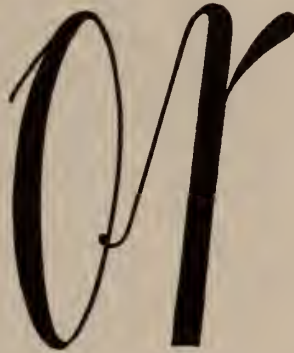
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CONVENTION NOTES

SCIENTIFIC PROGRAM

During the scientific assemblies, eighteen papers will be presented. The applications received were carefully studied by your Committee on Scientific Work, with regard to subject matter, qualifications of essayists and geographical representation. Ample time will be allotted to each essayist for the presentation and general discussion of his paper.

HEADQUARTERS HOTEL

The local Committee on Arrangements has decided to use the Mayflower Hotel at the corner of Bay and Julia Streets as the headquarters for the annual meeting, April 30, May 1 and 2. This hotel has ample facilities to take care of a large attendance.

The roof garden will be used for the general assembly room and banquet and the large lobby on the first floor will be used for the registration desk and technical exhibits.

ALUMNI AND FRATERNITY GATHERINGS

Representatives of alumni and fraternity groups who contemplate get-together meetings at the State Convention in Jacksonville are requested to make their wishes known as soon as possible. Arrangements will be made for meeting places for all groups provided sufficient notice is given to the local Committee on Arrangements.

It is necessary to arrange group meetings so they will not conflict with the program of the State Association. Tuesday noon (May 1) has in the past been considered the ideal time. However, if this particular day is not convenient for any group, your Committee will arrange such meetings for Monday noon, April 30.

Your Committee also requests information as to the approximate number who will be expected to attend each group meeting. Communications relative to Alumni and Fraternity Group meetings should be addressed to Dr. Charles B. Mabry, Jacksonville.

ANGLERS' COMMITTEE

Fishing trips for individuals or groups will be arranged during the annual meeting. Anyone desiring to arrive earlier than the convention date, or stay after the convention will find the Committee at his service. During the convention dates information concerning fishing trips may be secured at the registration desk. Those who wish to arrange trips in advance of the meeting are requested to communicate with Dr. A. H. Wilkinson, Jacksonville, chairman of the Anglers' Committee.

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National Hay Fever Antigens are standardized in nitrogen units. 1 nitrogen unit = 50 to 300 pollen units: this standardization enables proper doses of minimum bulk antigens to be given according to the need of the individual patient. Fixed or set doses, cannot give the selectivity of required dose.

Timothy Antigen for Treatment of Spring and Summer Hay Fever

Complete Treatment (24 doses) in 5 cc. Ampul-vials

		Price
V 225	{ Series "AA" 125 nitrogen units (8 doses) }	\$8.50
	{ Series "A" 250 nitrogen units (8 doses) }	
	{ Series "B" 500 nitrogen units (8 doses) }	

Single 5 cc. Ampul-vials are furnished as follows:

V 226	Series "AA" 125 nitrogen units (8 doses)	2.50
V 227	Series "A" 250 nitrogen units (8 doses)	3.75
V 228	Series "B" 500 nitrogen units (8 doses)	4.75

For patients requiring higher units strength

V 229	Special Series "C" 1250 nitrogen units	6.00
-------	--	------

Rag Weed Antigen for Treatment of Fall Hay Fever

Complete Treatment (24 doses) in 5 cc. Ampul-vials

V 209	{ Series "AA" 125 nitrogen units (8 doses) }	8.50
	{ Series "A" 250 nitrogen units (8 doses) }	
	{ Series "B" 500 nitrogen units (8 doses) }	

Single 5 cc. Ampul-vials are furnished as follows:

V 2091	Series "AA" 125 nitrogen units (8 doses)	2.50
V 211	Series "A" 250 nitrogen units (8 doses)	3.75
V 212	Series "B" 500 nitrogen units (8 doses)	4.75

For patients requiring higher units strength

V 215	Special Series "C" 1250 nitrogen units	6.00
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Dear County Presidents and Committee
Chairmen:

We are rapidly approaching the time of our State Convention to be held in Jacksonville April 30th to May 2nd, and should be thinking about the record of our work that is to be turned in at that time. If for any reason you can not attend the convention and are not represented by a delegate, please send your report to the recording secretary, Mrs. Wilburn Lassiter, 416 Virginia Ave., Gainesville, not later than April 20th. If you have any suggestions relative to our work for next year, please send them in, typewritten, in time for the Board meeting preceding the annual business session.

Looking forward with pleasure toward seeing you, and a large delegation from your county, in Jacksonville, I am,

Faithfully yours,

ELIZABETH PEEK, *President.*

* * *

Duval Medical Auxiliary extends greetings to the doctors' wives of the state and most cordially invites them to attend the meeting of the State Medical Auxiliary. An interesting Auxiliary meeting is being planned as well as entertainment features for all to enjoy.

* * *

PINELLAS COUNTY

Association Votes to Pay Tuition for One High School Pupil.

In a well prepared paper on "The Romance of Medicine," covering the ancient and medieval periods, Mrs. O. O. Feaster entertained members of the Auxiliary to the Pinellas County Medical Society at the conclusion of the regular luncheon meeting Tuesday, February 20th, at the Pennsylvania hotel.



Many uses for this delicious high- caloric food-drink...

TO THE convalescent—to the expectant or nursing mother—to the active, growing child a Cocomalt milk beverage is a delicious change from the monotony of plain milk.

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I have just had a very unusual experience. I actually *enjoyed* paying a bill.

It is your bill. And as bills go, it has begun to take on a shabby, neglected look.

Like most people, I have had extremely tough sledding for the past few years. I had to pay my grocery bills, or get no more groceries. I had to pay the light bills, or they'd shut off the electricity. I had to pay the coal man or face an empty coal bin.

But I didn't have to pay yours—and so I put it off.

I imagine my case is not unique. For you doctors belong to a pro-

fession in which service to humanity comes before everything else. You made this evident in our case. When my wife was sick, your first thought was how to bring her back to health quickly. You stood by us through everything . . . giving without knowing when you would receive.

Now things are a little better with me. When they started to get better, both my wife and I agreed that one of the very first things we'd do, would be to pay your bill. Here is the check. And please believe me when I say that it was a genuine pleasure to write it.

With it goes my heartfelt gratitude for all you have done for us,

and for the sporting way you carried us when bills were the bane of a harried existence.

Sincerely Yours,

H_____G_____

Many a doctor's bill has been gathering dust these past few years. Today, with the brightening economic skies, surely among the first obligations to be met are unpaid bills for medical services.

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Mrs. Feaster was introduced by Mrs. Wyman Harden, program chairman, who pointed out that this paper was the first in a series on "The Romance of Medicine," dealing with man's dramatic search for health since the beginning of time.

Preceding the short business session at which the president, Mrs. John Herring, presided, Jack Lee pleased his listeners with three melodies.

During the business session, Mrs. Prescott LeBreton, hygiene chairman, asked that the books issued to members be reported on at the next regular meeting in April.

Responding to the program outlined by the emergency school committee the auxiliary voted to adopt a high school student for the remainder of the school term.

Members present at the meeting were Mesdames O. O. Feaster, John Herring, R. K. O'Brien, T. B. Echard, John Hardenbergh, W. C. McConnell, Francis Langley, A. S. Anderson, William Farber, N. W. Gable, Jr., George Miller, Alvin Mills, Prescott LeBreton, Wyman Harden, Earl MacCordy, A. P. Roope and F. S. Jennings.

Guests were Mrs. R. W. Owen, Mrs. N. M. McClellan, Mrs. Gottschalk, Mrs. J. A. Norpell and Mrs. Ralph Stevens.

* * *

DUVAL COUNTY

Medical Society Auxiliary Has Many Plans.

Mrs. Theodore G. Croft was hostess for the meeting of the Woman's Auxiliary to the Duval County Medical Society Thursday afternoon, March 1st, at her home in Riverside.

Mrs. Gordon Ira presided at the business session, and introduced as guest speaker, Dr. Robert B. McIver, who reported on plans being made by the society for the meeting here in May of the State Medical Association.

The date of the Auxiliary fiscal year was changed to June from January.

Mrs. Frederick J. Waas, social chairman, outlined entertainment plans for the state meeting, and asked cooperation.

Mrs. A. K. Wilson, program chairman, gave a talk on countries and cities where early practice of medicine began, illustrating her talk with a wall map. She then introduced Mrs. John H. Mitchell, who read a paper on the history of ancient medicine. Mrs. B. A. Chapman reviewed current events in the medical world, including the New York stage success, *Men in White*.



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The next meeting will be with Mrs. A. H. Wilkinson in June at her beach cottage.

During the social hour, a tea course was served. Present at the meeting were about 25 Auxiliary members.

* * *

ALACHUA COUNTY

Alachua County Auxiliary met for their monthly luncheon at the home of Mrs. J. Maxey Dell, Jr., on Tuesday, February 27th, with Mrs. I. A. Dailey of Micanopy assisting hostess.

Election of officers for 1934-1935 as follows:

President—Mrs. J. E. Maines, Jr.

Vice-President—Mrs. S. D. Rice.

President-Elect—Mrs. G. C. Tillman.

Secretary—Mrs. Wilburn Lassiter

Treasurer—Mrs. R. E. Summitt.

* * *

MARION COUNTY

On February 3 Mrs. J. N. Moore was hostess to the Marion Auxiliary at a luncheon at Silver Springs, the luncheon being served on gaily decorated tables under the big oaks.

After luncheon and a brief business session Mrs. E. G. Peek, State Auxiliary president, introduced the guest of honor, Dr. Elizabeth Farra, of the Mission Hospital, Ambala, India. Dr. Farra, in the costume of the women of India, spoke most interestingly of conditions there. She displayed photographs and beautiful pieces of hand woven and dyed materials. The Auxiliary presented her with a check to be used for her hospital.

About fourteen members were present to enjoy this unusual treat. The remainder of the afternoon was given over to a boat ride on Silver Springs.

On the evening of February 7th, Mrs. R. D. Ferguson and Mrs. J. N. Moore were joint hostesses at a buffet supper at the former's home at which time the doctors of Ocala and their wives had the privilege of meeting Dr. Farra and hearing her tell of her work in India.

The program of the Woman's Auxiliary at the annual convention appears on page 470 of this Journal.



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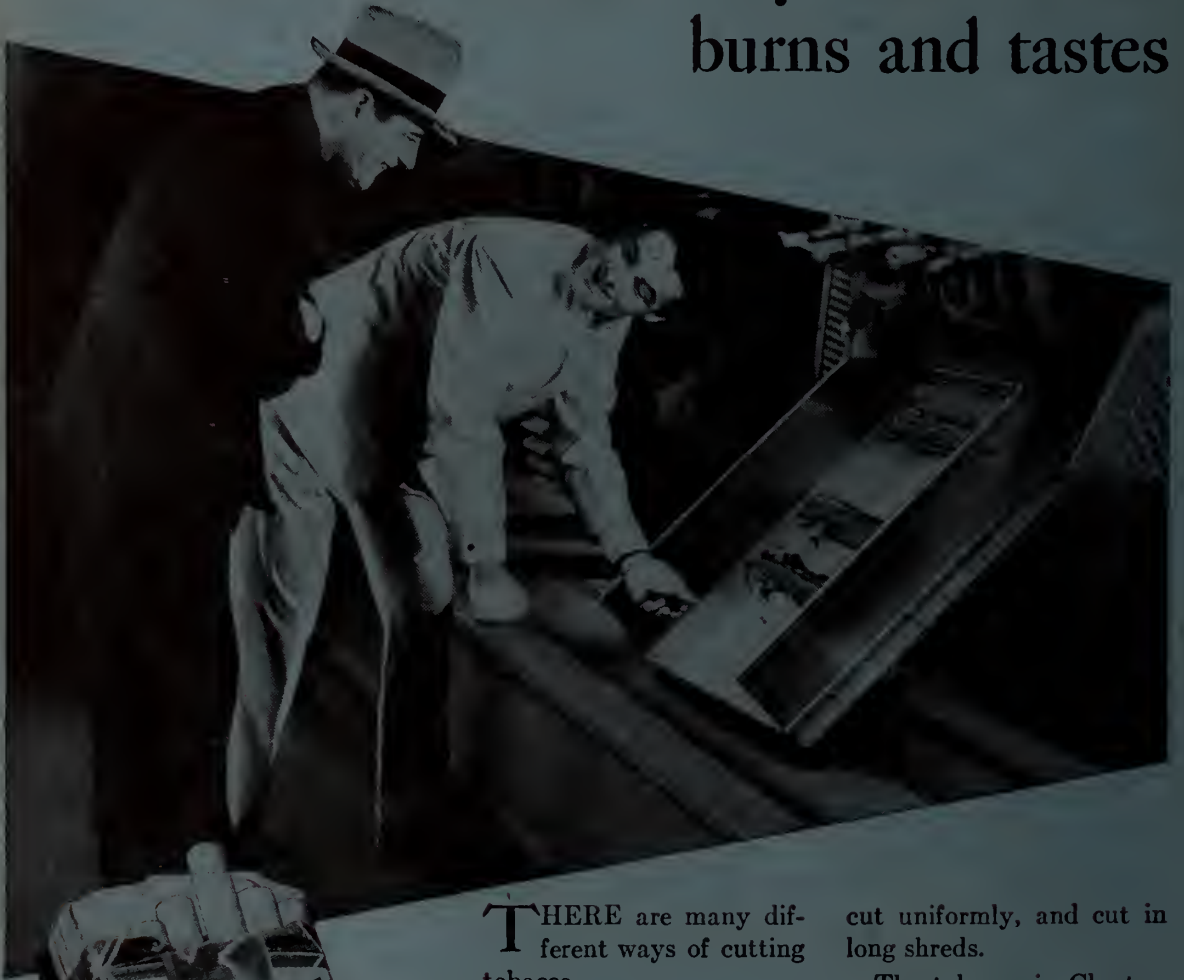


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Florida Medical Association, Inc.

THE FLORIDA ACADEMY OF MEDICINE
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VOLUME XX
NO. 11

Jacksonville, Florida, May, 1934

Yearly Subscription, \$3.00
Single Copy, 30c

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American Medical Association, Cleveland, June 11-15, 1934.
Southern Medical Association, San Antonio, November 13-16, 1934.

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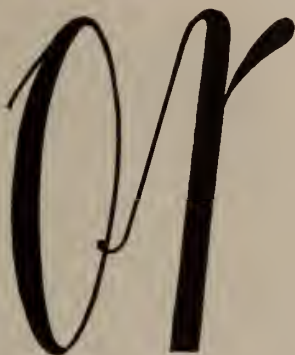
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which are imitations of
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the relative proportions
of protein, carbohydrate
and fat, outwardly seem
to affect the infant in a man-



ner similar to breast milk,
notwithstanding the fact that
they "are entirely lack-
ing in the protective
properties which make
breast milk the safest
and most perfect food
for the infant."

(Kugelmass)

AUTHORITY: "In designing a formula for the artificially fed infant, what should be the goal? Macy has stated that it should be to surpass breast milk not to equal it. The philosophy that the composition of breast milk offers the best proportions for the artificial formula has given rise to the promulgation of numerous proprietary foods designed to provide a product of chemical composition similar to human milk. It often escapes the attention of the physician that even though the proximate analysis of such food may resemble closely that of human milk, the nature of its ingredients may be very dif-

ferent. The characteristics of milk proteins afford an excellent example. Human milk with a protein content of 1.5 per cent seems to meet the needs of the infant. It does not follow that any milk modification providing equivalent amounts of protein would be equally adequate, unless the protein were chemically, and possibly biologically identical. . . . Because of such intrinsic differences between human milk and its substitutes, the composition of human milk does not offer an optimum pattern for the artificial formula." (Boyd J. D. *Jour. Pediat.*, Vol. 4, No. 2, Feb. 1934.)

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, May, 1934

Number 11

President's Address*

WILLIAM M. ROWLETT, M.D.,
Tampa.

My Fellow Colleagues: Again I wish to express to you my gratitude for having honored me with the highest mandate within the gifts of this Association, a position made doubly honorable on account of the high calibre of the men who have preceded me as President of this organization, since it was founded sixty-one years ago. While ever conscious of the great responsibilities of my office, a responsibility increased by the world's greatest economic depression and social unrest, only to be further provoked with a twenty-five per cent cut in our dues which was voted at our last meeting in Hollywood, with the splendid cooperation of your officers and committeemen, we have unflinchingly faced these responsibilities. Your salaried officers, on account of their great love for you and the Association, have voluntarily cut their salaries, that the splendid work of the Association during these trying times would continue unhampered. Nearly all of your committees have had during the year from four to five meetings. Frequently members of these committees would have to be away from their work as much as two days at a time, in order to attend a meeting at some distant point. Many times have I thought what an inspiration it would be to those physicians who are only luke-warm in their local society to see the sacrifices these men are making for them, that they may continue unhindered to practice their profession.

It is just such loyalty to your profession and Association that has safely brought it through the troublesome days of the past and will continue through the troublesome days of the present and future.

Picture the hardships that our forefathers had to endure sixty-one years ago when they founded this Association. They were practicing in a

comparatively unexplored territory, consisting mainly of forest, beast and pestilence. Stage coaches were the main mode of transportation, villages were few and far between. Distance, discomfort of travel, however, meant very little in the way of dampening their spirits. These trail-blazers of humanity had an inheritance to hand down, and to you men who are taking only a half-hearted interest in your County Society and State Association, I throw this challenge; have you kept faith with this inheritance?

The achievements of this Association in the past are too well known to you to repeat. Its future and that of organized medicine depend upon how much of the "do or die" spirit of our forefathers we have retained. They may not have possessed the science of the art of healing that is possessed by the young physicians of today. To them the future may have been painted in different colors. What was lacking in science was fully compensated for by their knowledge of the humanitarian side of the art and a mind that knew no fear. They never left the sick-room without leaving renewed hopes with the patient. The lack of knowledge of therapeutics was offset by their ability as psychoanalysts and a priesthood gentleness that carried with it a tremendous healing power. Little did they hear the cry from their weary sick patients that we hear so often from them in this cold machine age. "Is there any balm in Gilead? Are there no physicians there?"

After seventeen very active years in this Association, most of which time was spent on your legislative committee endeavoring mainly to control the cults, I have arrived at the conclusion that too much science and not enough humility in the M. D. of today has been the prevailing cause of the increasing popularity of that type of practitioners. While in a way we have endeavored to keep the faith, and have gone far in

*Delivered before the Sixty-first Annual Meeting of the Florida Medical Association, held at Jacksonville, April 30, May 1 and 2, 1934.

the direction that this organization was intended to, there appears on the highway a mirage. Many do not believe that it is an optical illusion, but a real dividing of the way. Just where this by-way will lead, no one knows. However, we must not be static less we retrogress. Daily new conditions are arising, and in order to meet them squarely, we must have an open mind.

With that same loyalty and support of our members that characterized the founders of this organization, I have no fear of the outcome of organized medicine and the retention of the time-honored personal relationship between patient and physician. However, to accomplish this end, it is going to require a solid front and loyalty to your Association, your officers and fellow members. Those who do not have the inclination or time to become interested in their local society, but continue to benefit by the unselfish energy of others while they themselves quietly sit back and enjoy the unearned profits, I proclaim are unworthy of the title of M. D. They are just as much a pest to our profession as the cults whom they are continually barking about getting their practice.

There is an old saying in this country, "The price of Liberty is eternal vigilance." There is an ever-living thought that should be thoroughly instilled into the head of every young physician who is about to embark upon his profession, "the price of success and that of your profession is eternal thinking and work." With this lesson once learned I feel sure that every physician who is sincere to his calling would soon realize that it is his first duty to stand by the tenets of his organization and his fellow colleagues.

My outstanding endeavors since being elected your President were:

First. Keeping the economic situation squarely before you.

Second. Combating the extensive program of the cults by educating, through various channels of publicity, the ill-informed as to what scientific medicine is and stands for.

Third. Trying to bring into organized medicine every ethical, legally licensed physician in the state. While I have been very interested in every committee's work, I consider the above, paramount questions that needed extra effort.

In these days of unrest and economic upheaval, the medical man has had many trying conditions to overcome. In addition to the many

thousands of the poor and unemployed who have never worked and never will work, and whom the physician has always had to care for gratuitously, there has been an equally as large if not larger number made destitute by the economic condition of the day, and still a larger number whose income is barely adequate to afford the mere necessities of life. The latter two groups compose the best of our citizenry. They have been accustomed to the nicer things of life, would work if they could get work and resent the thought of accepting charity. It is for this class that organized medicine must make proper adjustments, in order that they may receive the benefits of our knowledge and that the glorious traditions of our profession in the art of healing, may continue unassailed.

The unthinking public is inclined to accept the opinions advanced by the tabloid newspapers, the decisions arrived at in the smoking compartment of the Pullman and the bridge party gossip, in which the physician has had more than his due share of discussion.

While it requires nearly twice as long and twice as much money for the medical student as it does for any other professional student of today to complete his education, statistics show that two-thirds of the physicians of this state have an annual income of only twenty-five hundred dollars per year. Think of such a reward after his long course of study, and the enormous expense for same. He is barely subsisting near the starvation point. There are in Florida today fifteen hundred practicing physicians. One thousand of these average twenty-five hundred dollars per year, making a total of two and one-half million dollars a year that the two-thirds of the physicians in this state are getting. It is conservatively estimated that industry in Florida loses yearly one million dollars through disabilities due to preventive diseases. Statistics further show that over eight million dollars is spent annually in the state for patent medicines, fakers and cults, which is nearly four times the amount that those two-thirds, half-paid physicians in our state receive for their compensation. It may also interest you to know that this same public that is trying to tell us how to practice medicine, is spending seven times as much money for motion pictures, candy, cosmetics and similar items, as it does for medical care. Judging from the above figures, it is not the question of too many physicians or too highly paid physicians

that is the disturbing element in the medical economic situation of today, but lack of proper distribution of the physician and medical care.

It further appears that the field of the specialist is being a little overcrowded. In other words, there are too many generals and not enough privates in this medical army of ours.

Again I say, I have no fear for the ultimate outcome of the private physician. The law of demand and supply has always been successful in regulating production and I feel that it will work true to form in regulating this question. In the meantime, however, the cantankerous politician with his demagogue tactics will continue to preach that socialized and state medicine is the proper solution of the question. But the sound thinking American who has had to witness the political corruption of the day which has entered nearly every phase of our city, state and national affairs, will still look upon the physician who ministers to his most intimate needs and learns the deepest secrets of his home, as sort of a sacred being, and I don't believe he will ever consent to replace his private physician with a public one. In the late world war, the leaders recognized that victory depended upon the health welfare of their soldiers and they proceeded to secure the best and most scientific medical and surgical talent available. To accomplish this, they did not depend upon the public physician, but instead accepted the volunteer services of our great physicians of private practice. What was the result? The elimination of the usual war-time epidemics. No typhoid fever, no smallpox, no tetanus, no dysentery, and the knowledge by our soldiers that if injured, the most skillful and scientific care awaited them. Just as long as the Christian religion survives, so long will the private physician survive. I mention religion in connection with medicine on account of the two having so many things in common.

Judging from figures that I have given you, I feel confident that our general practitioners in these days of depression could increase their income at least twenty per cent by adhering to a rigid campaign of prophylactic and preventive medicine.

We all would enjoy an appreciable increase in our income if we would get more staunchly behind our Committee on Public Relation. In order to more successfully combat the propaganda of the patent medicine vender and the cult, our colleges must also awaken to the importance

of instilling a little salesmanship into their curriculum.

It is said that the course of study prescribed by cult colleges consists of ninety per cent salesmanship and ten per cent science, as compared to our first class colleges where they teach one hundred per cent science and no salesmanship. The patient cares very little for the highly technical name that you call his disease. What he is most interested in is comfort and getting well.

Were it not for the progress of our public health departments which in recent years have had to shoulder the responsibility of preventive medicine, I fear we would not have been able to stand the gaff.

It is very gratifying to learn that during the past year, not a single malpractice suit has been successfully prosecuted. To a very large extent the loyalty of our members to each other is responsible for the happy culmination of these suits. Only in very rare instances can we find where one of our members testified against another member. In order to correct this iniquitous habit, our local societies should require that before any of its members testified against a fellow member he should first get permission from his board of censors. With such a policy put into vogue, malpractice suits would soon be a thing of the past, and the maligners would have to seek other quarters.

Thus far I have spoken to you of those things that have more or less direct bearing upon organized medicine. I feel that it would be very timely, and in keeping with public opinion, for this Association to offer to the downtrodden and weary taxpayer some solution whereby the steady mounting tax burden might be lessened, a proper workmen's compensation law or a health insurance plan, one which would overcome the economic barrier which today is keeping the patient, the doctor and the hospital apart, and at the same time allow the insured the privilege to choose his own physician. Such a plan would relieve the burden of charity not only to the physician, dentist and druggist, but also the heavy hospital burden which reverts back to the taxpayer. The question of sterilization of the mentally diseased and unfit, the army and navy war-time prophylactic measure against venereal diseases which proved so efficacious, I feel should be gone thoroughly into. I am also convinced that the federal code relative to contraceptives is unsuitable. We have in this state an appalling

maternal mortality as the result thereof. In those cases where nature was permitted to take its course, it has been found that a large majority of the families were of feeble mind and body and dependent upon charity, a situation to be multiplied on down from generation to generation, rapidly increasing the paupers and at the same time decreasing the taxpaying classes. If this condition is not remedied, we will eventually have in this country all paupers and no taxpayers.

The public is rapidly becoming health conscious and possessed of a fairly keen knowledge of prevention of disease. In calling for a new deal, it is cognizant of the fact that while we have done much to obviate suffering, our program is incomplete. Our national, state and municipal health organizations are spending millions of dollars annually in a campaign for eradication and education, teaching the people how to prevent tuberculosis, malaria, typhoid and many other diseases. Practically nothing has been spent advising the people as to the cause of blind babies, invalid women, insanity and criminals which is costing the taxpayers of our state millions of dollars annually. According to the last report of the comptroller 20% of the state's general revenue disbursements is spent caring for these unfortunate ones.

That we may confront this challenge fairly and squarely, I am going to recommend to you that we create at least three new committees. First, a committee, to be known as Committee on Inter-relationship whose function would be to work with similar committees from our allied professions, who have much in common, namely, the dentists, and druggists. I have had interviews with officials from these organizations and they are one hundred per cent for such a committee, and can not understand why it was not created before now. By working in unison we could develop plans that would aid in correcting certain charity abuses, and by combining our efforts put up a more effective fight against destructive legislation and elevate our common cause.

The second committee would be one on tuberculosis and public health, whose function would be to work along the lines and cooperate with the Florida Tuberculosis and Health Association. Similar committees are functioning in the District of Columbia, Missouri, New York, New Jersey, Idaho and in other states.

The third committee would be created for the purpose of investigating and promulgating plans

for feeble-minded and venereal disease control.

In concluding my address to you, I wish to thank the officers, councilors and committees of this Association for your loyal and untiring efforts to make this year in the life of our organization a successful one. In our increased, paid-up membership effort, the councilors rendered excellent assistance. At the preconvention meeting held in Jacksonville in January, if my memory serves me correctly, there was a quorum present of every committee of the Association. This will go down in our Association's history as one of its most successful preconvention meetings.

In the Woman's Auxiliary we have an unadorned jewel that will prove of unlimited value if properly utilized. The publishing and distribution this year of thousands of these folders, entitled "A New Deal in Health", I feel is going to prove a boon to our cause. Furthermore, I want you to know that they paid for every cent of the expense themselves.

The last report that I had from them they were interviewing candidates for the legislature on a proposed law for the creation of a state board of credentials whose duty would be to pass upon the credentials of all persons seeking to practice any form of the healing arts in Florida. History tells us that the women were responsible for the Italian Renaissance. Let us hope that history repeats itself.

I am proud of the activities of our county societies during the past year, and the large number that has come to this meeting with a one hundred per cent paid up membership. Doubly proud am I of old Hillsboro, my home society. She has the distinction of being the first county society in the state with a membership of over a hundred, one hundred per cent paid up.

It has been a great pleasure to represent you during the past year as your President. I hope that your work with me has been as pleasant as my associations with you.

A. M. A. TO FLORIDA

Plans are under way to bring the meeting of the American Medical Association to Florida. All members of our Association are urged to use their influence to this end.

PROCEEDINGS

of the

SIXTY-FIRST ANNUAL MEETING

of the

FLORIDA MEDICAL ASSOCIATION, Inc.

HELD AT JACKSONVILLE, FLORIDA

April 30th, MAY 1st, and 2nd, 1934

The Sixty-first Annual Meeting of the Florida Medical Association was called to order at 1:30 p. m. Monday, April 30th, on the roof garden of the Mayflower Hotel, Jacksonville, Florida, by Dr. Robert B. McIver, Chairman of the local Convention Committee.

The invocation was rendered by the Reverend Newton Middleton, rector, St. John's Episcopal Church.

Dr. A. G. Fort and Dr. J. M. Smith, delegates from the Georgia Medical Association, were introduced. Dr. J. M. Smith made a brief address on behalf of the Georgia Medical Association, in which he stated that the bond existing between the two States was not merely one of professional duty, many of the people in Florida having been reared or educated in the State of Georgia. He assured the members of the Association that the interest Georgia felt in Florida was genuine.

Dr. W. M. Rowlett, President of the Association, was then presented by Dr. McIver, and gave his presidential address.

Dr. McIver extended thanks to Drs. Stewart Thompson and Theo Croft for their cooperation in preparing for the convention.

Dr. Rowlett then took the Chair and called for the reports of officers.

The following joint report of the Secretary-Treasurer-Editor and Business Manager was read by Dr. Shaler Richardson:

JOINT REPORT OF
SECRETARY-TREASURER, EDITOR OF
THE JOURNAL, DR. SHALER RICH-
ARDSON, AND BUSINESS MAN-
AGER, DR. STEWART G.
THOMPSON

*To The President and Members of the Florida
Medical Association in Session at Jacksonville.*

GENTLEMEN:

MEMBERSHIP

A total of 893 paid members was recorded in 1933 as compared with a total of 927 for the previous year—a shortage of 34 paid members. Dues collected for both years were on the basis of \$10.00 per member.

It is very difficult to explain a reasonable cause for so many members to drop out of the State Association. It is hoped that the reduction of membership dues to \$7.50 will be the means of increasing our membership. The fact that 838 of our members have paid their 1934 dues, as compared with a total of 594 at the same time the previous year, is very encouraging. A total of \$3,119.58 was collected in back dues since our annual report last year. According to the reports from the various component societies, the Association now has a total membership of 970, of which 838 have paid their dues to the Association for 1934.

The Dade County Medical Society again holds first place in the number of paid members for 1933, having a total of 179 paid members, which is 100% of their membership for that year. Duval County Medical Society is second with a total of 139 paid members out of a total membership of 146. Thirteen component societies show 100% of their membership dues paid for the calendar year 1933. They are as follows: Dade, Pinellas, Palm Beach, Broward, Pasco-Hernando-Citrus, Marion, St. Lucie-Okeechobee-Indian River-Martin, Seminole, Walton-Ocala, Bay, Columbia, Monroe and Sumter.

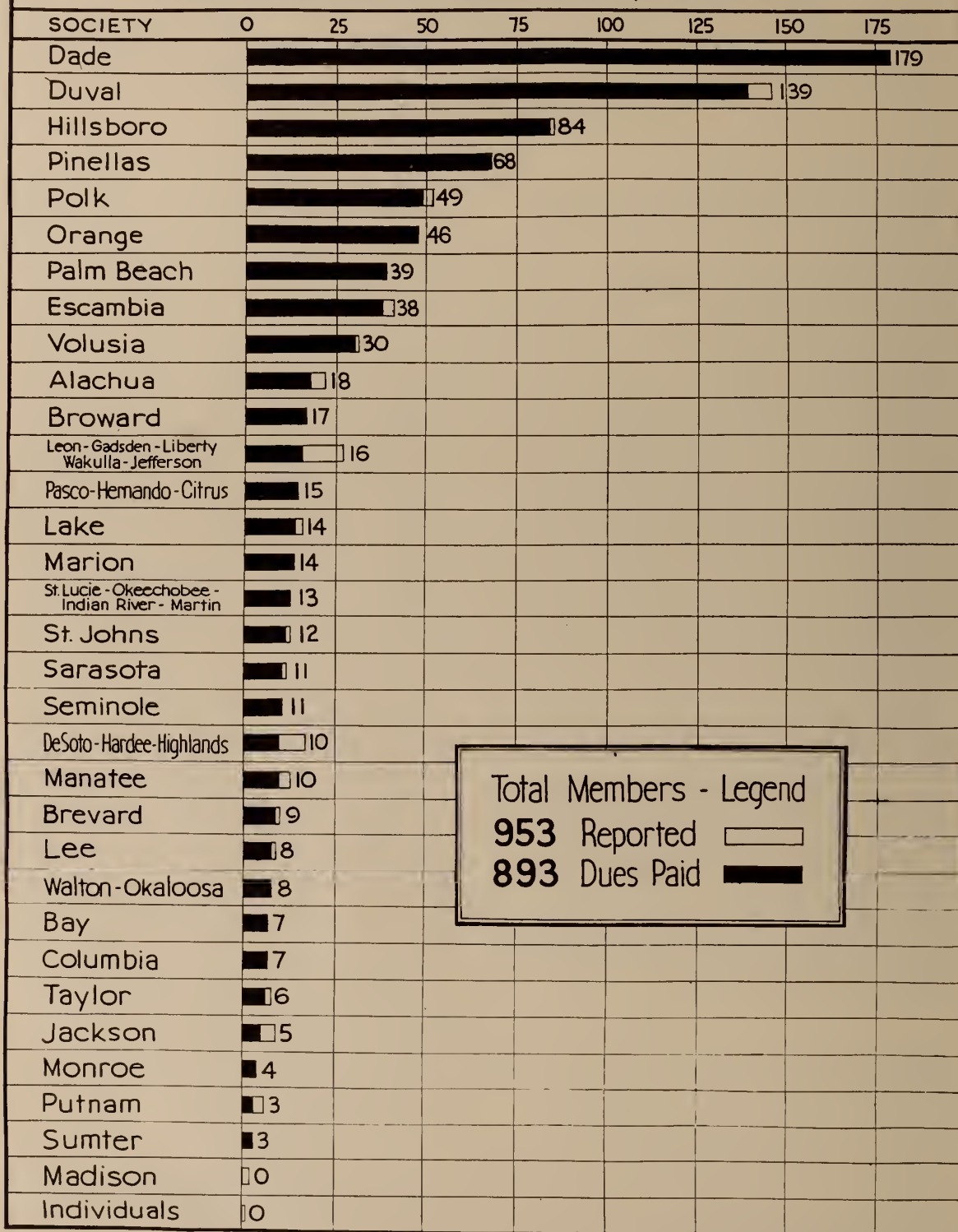
With the reduction of annual dues to \$7.50, it is reasonable to anticipate an enlargement of our membership in the near future.

JOURNAL

Your Journal was mailed regularly each month during the past year. If any of our members observed the change in quality and weight of paper and cover, it was not called to the attention of your editorial department. The inside of the

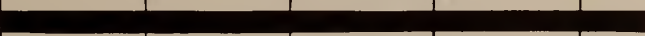
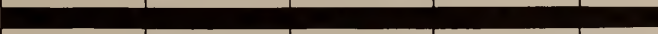
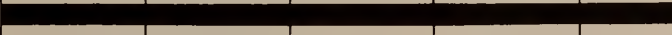


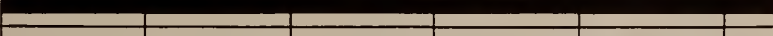
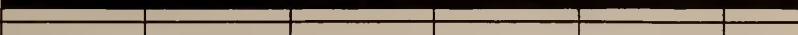
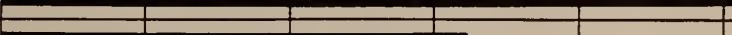
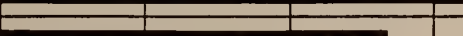
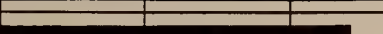

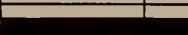
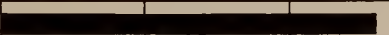


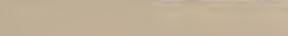
FLORIDA MEDICAL ASSOCIATION, INC.

Total Reported and Paid Members by Societies - 1933



FLORIDA MEDICAL ASSOCIATION, INC.

Total members who have paid state dues
~ 1918 to 1933 inclusive ~

Year	Total	Members					
		0	200	400	600	800	1000
1933	893						
1932	927						
1931	934						
1930	964						
1929	1020						
1928	1068						
1927	1106						
1926	1018						
1925	645						
1924	536						
1923	482						
1922	271						
1921	545						
1920	524						
1919	396						
1918	409						

Journal has, for a number of months, been printed on a somewhat lighter paper, similar to that used by the A. M. A. and a number of state Journals. The cover also is of a cheaper grade than formerly used. After several conferences and careful figuring with the printer, an additional 10% reduction was given by the printer during the year.

Every possible means of reducing the cost of the production of the Journal has been used. At the same time, the appearance and quality of material and workmanship have been considered and, by comparison, we feel that the Journal of the Florida Medical Association is very much above the average of the other state Journals in this respect.

FINANCES

The expenditures of the Association during the past year have been carefully curtailed. Every possible saving has been made. Your secretary voluntarily donated his salary as of January 1st and all other salaries were reduced

as of the same date. The net income, therefore, over expenditures for the past year amounted to \$2,729.96 as compared with \$835.40 for the previous year. Earnings from advertising amounted to \$2,481.73 as compared with \$2,240.60 for the previous year, making a net increase from this source of \$241.13.

Earnings from technical exhibits amounted to \$763.50 as compared with \$442.50 for the previous year, making a net increase of \$321.00. The fact that Jacksonville is the convention city this year in a measure accounts for the increase in income from technical exhibits as many firms will exhibit in a large city who will not exhibit in a small one.

The cost of the Journal was materially decreased both from a printing standpoint and from the paper and cover used in the publication. Another slight saving was made possible through an action of the Executive Committee to discontinue paying for one-half the cost of cuts illustrating essayists' articles. The State Association

has, for a number of years, paid one-half the cost in connection with illustrating articles in the Journal. By the action of the Executive Committee, however, essayists who wish their articles illustrated will be required to pay for the electrotypes.

The net increase in finances as shown this year cannot be expected for next year owing to the fact that \$3,119.58 was collected in back dues at the old \$10.00 membership rate. All 1934 dues that will be collected after the meeting will be on a \$7.50 basis and therefore will not produce as much back revenue as was experienced last year.

The books and records of the Association are open to our members and we will be glad to answer inquiries of any nature. The books have been audited by Ford, Boyd & Colley, and a certification thereof is incorporated in the statements which follow.

Respectfully submitted,

SHALER RICHARDSON.

STEWART G. THOMPSON.

FORD, BOYD & COLLEY

CERTIFIED PUBLIC ACCOUNTANTS

JACKSONVILLE, FLA.,

April 27, 1934.

DR. SHALER A. RICHARDSON,
Treasurer, Florida Medical Association,
Jacksonville, Florida.

DEAR SIR: We have examined the attached statements of Cash Receipts and Disbursements of the Florida Medical Association for the period begun April 18, 1933, and ended April 16, 1934, both inclusive. These statements have been prepared by Dr. S. G. Thompson, Business Manager of the Florida Medical Association and the Florida Medical Journal, and correctly reflect the total amounts received and disbursed as shown by the books.

In accordance with your instructions, we have checked the total of the collections shown by the statements with the corresponding total shown by the books and have found them to be in agreement.

Cancelled bank checks were examined and compared with the corresponding entries in the cash journal; the additions of the cash journal were checked and all postings were checked to the general ledger. The general ledger additions were checked and a trial balance taken off as of April 16, 1934.

Bank accounts were reconciled with bank statement and pass book, and written confirmations were obtained from the bankers.

As we do not have access to the records of the various County Societies for the purpose of checking the remittances of dues, attention is directed to Exhibits D and F which give details as to this matter. The inspection of these exhibits by the officers of the respective societies will enable them to verify the correctness of the remittances shown.

Income from Journal advertising was verified substantially by comparison with a statement of the contracts with advertisers.

Ten (10) U. S. Treasury Bonds, par value \$1,000.00 each (interest rate 3 $\frac{3}{8}$ %) were inspected by us. These bonds represent an investment of the Association; interest collected on them during the period amounted to \$337.50.

Yours very truly,

FORD, BOYD & COLLEY.

CONSOLIDATED CASH STATEMENT

April 17, 1933, through April 16, 1934.

Receipts

Cash in Bank, April 17, 1933.....	\$11,935.84	
Dues Collected (Exhibit "D")....	\$ 9,179.58	
Earnings from Advertising (Exhibit "E")	2,481.73	
Subscription and Miscellaneous Sale of Journal	6.90	
Bonus from Cooperative Medical Adv. Bureau	83.89	
Interest on Savings and Investment	570.80	
Earnings—Technical Exhibits (Exhibit "C")	763.50	13,086.40
Total Cash to be Accounted for.....		\$25,022.24

Disbursements

General Fund Expenses (Exhibit "A")	\$ 4,645.95	
Journal Expenses (Exhibit "B")..	4,735.66	
Technical Exhibit Expenses (Exhibit "C")	\$216.74	
To Entertaining Societies..	414.00	630.74
Committee Expenses	26.66	
Furniture and Fixtures.....	45.05	
Library	8.30	
Federal Tax	14.08	
Prosecutions	250.00	10,356.44
Balance in Bank, April 16, 1934.....		\$14,665.80

EXHIBIT "A"

CASH STATEMENT—GENERAL FUND

April 17, 1933, through April 16, 1934

Receipts

Cash as per last audit.....	\$17,847.86	
Back Dues Collected (Exhibit "D")	\$3,119.58	
Current Dues Collected (Exhibit "D")	6,060.00	9,179.58
Interest on Savings and Investment.....		570.80
Total Cash to be Accounted for.....		\$27,598.24

Disbursements

Postage and Supplies	\$ 206.53	
Telephone and Telegraph ..	161.99	
Salaries	3,413.58	
Secretary-Treasurer Salary	333.33	
Convention Expense	126.89	
Bond of Treasurer	18.75	
Office Rent	180.00	
Legal Counsel	100.00	
Photostats	7.20	
Custody of Bonds.....	10.00	
Traveling Expense	6.53	
Copies of Legislative Bills ..	14.00	
Incidental Expense	17.15	
Auditing Expense—2 yrs.	50.00	\$4,645.95
Committees:		
Medical Economics ...	\$ 3.26	
Public Relations	7.25	
Post-Graduate Course.	16.15	26.66

Furniture and Fixtures.....	45.05	
Library	8.30	
Federal Tax	14.08	
Prosecutions (Action		
House of Del., 1932):		
Dade County Medical		
Society	\$ 200.00	
Lee County Medical		
Society	50.00	250.00
To Journal Fund (Overdraft—		
Difference between \$3.00 per		
member and cost of Journal ac-		
cumulated over many years,		
\$6,413.97)	8,577.11	13,567.15
Cash Balance		\$14,031.09

EXHIBIT "B"

CASH STATEMENT—JOURNAL FUND
April 17, 1933, through April 16, 1934.

<i>Receipts</i>		
As per last audit (overdraft).....	-\$ 6,413.97	
Earnings from Advertising		
(Exhibit "E")	\$2,481.73	
Subscription and Miscellaneous		
Sale of Journal	6.90	
Bonus from Cooperative Medical		
Adv. Bureau	83.89	
From General Fund.....	8,577.11	11,149.63
To be Accounted for	\$ 4,735.66	

<i>Disbursements</i>		
Postage and Supplies	\$ 154.68	
Telephone and Telegraph.....	64.49	
Salaries	1,231.43	
Editor's Salary	333.33	
Printing of Journal and Electrotypes	2,903.83	
Bond of Treasurer	18.75	
Drayage	15.00	
Incidental Expense	14.15	4,735.66
Cash Balance		\$ 0.00

EXHIBIT "C"

CASH STATEMENT—EXHIBIT FUND
April 17, 1933, through April 16, 1934

<i>Receipts</i>		
Cash as per last audit.....	\$ 501.95	
Earnings from Technical		
Exhibits	\$690.00	
Refund from Broward		
County Medical Society..	73.50	763.50
Total Cash to be Accounted for.....		\$ 1,265.45
<i>Disbursements</i>		
Postage and Supplies.....	\$ 9.00	
Telephone and Telegraph..	4.65	
Salaries	38.31	
Drawing, Printing, Sign		
Painting, etc.	64.10	
Convention Expense	75.53	
Incidental Expense	25.15	\$216.74
To Entertaining Society (Broward)	73.50	
To Entertaining Society (Duval) ..	340.50	630.74
Cash Balance		\$ 634.71

EXHIBIT "D"

DUES COLLECTED APRIL 17, 1933, THROUGH APRIL 16, 1934.

Name of Society	Total Members	No. Paid Members	No. in Arrears	1934 Dues Collected	Back Dues Collected
Alachua	21	17	4	\$ 120.00	\$ 60.00
Bay	7	5	2	30.00	60.00
Brevard	9	5	4	30.00	40.00
Broward	17	16	1	112.50	10.00
Columbia	8	8	0	52.50	.....
Dade	193	161	32	1,200.00	630.00
DeSoto-Hardee-Highlands	16	14	2	97.50	69.58
Duval	145	111	34	825.00	780.00
Escambia	38	24	14	172.50	170.00
Hillsboro	101	101	0	750.00	310.00
Jackson	11	10	1	67.50	.....
Lake	17	16	1	112.50	.....
Lee	9	9	0	60.00	10.00
Leon-Gadsden-Liberty-Wakulla-Jefferson	26	22	4	157.50	40.00
Madison	2	2	0	15.00	.....
Manatee	11	11	0	75.00	40.00
Marion	19	18	1	127.50	60.00
Monroe	3	3	0	15.00	.....
Orange	47	44	3	322.50	130.00
Palm Beach	35	35	0	255.00	160.00
Pasco-Hernando-Citrus	14	14	0	97.50	80.00
Pinellas	76	73	3	540.00	150.00
Polk	48	45	3	330.00	130.00
Putnam	3	2	1	7.50	10.00
St. Johns	10	9	1	60.00	20.00
St. Lucie-Okeechobee-Indian River-Martin.....	13	10	3	67.50	.....
Sarasota	11	11	0	75.00	.....
Seminole	10	10	0	67.50	.....
Sumter	3	0	3	.....	.....
Taylor	7	7	0	45.00	20.00
Volusia	32	17	15	120.00	130.00
Walton-Okaloosa	8	8	0	52.50	10.00
Totals	970	838	132	\$6,060.00	\$3,119.58
				3,119.58 Back dues collected	
				\$9,179.58 Total dues collected	

EXHIBIT "E"

EARNINGS FROM ADVERTISING

April 17, 1933, through April 16, 1934

May, 1933	\$ 126.01
June	131.05
July	246.41
August	137.51
September	246.98
October	265.71
November	136.33
December	241.51
January, 1934	200.32
February	253.57
March	161.34
April	334.99
Total	\$2,481.73

EXHIBIT "F"

NAMES OF MEMBERS DROPPED BY REASON OF
REMOVAL, NON-PAYMENT OF DUES, ETC.

April 17, 1933, through April 16, 1934

Name and Address.	Dues Not Paid	
	1933	1934
ALACHUA COUNTY MEDICAL SOCIETY:		
Dailey, I. A., Micanopy.....	\$10.00*	\$....
King, Seeber, Lake Butler.....	10.00*	....
Lassiter, Wilburn, Gainesville	10.00*	....
Weeks, L. R., Trenton.....	10.00	7.50
BAY COUNTY MEDICAL SOCIETY:		
Lee, W. J. (deceased), Panama City...	10.00	....
BREVARD COUNTY MEDICAL SOCIETY:		
Schlernitzauer, Robert, Rockledge.....	10.00	7.50
DADE COUNTY MEDICAL SOCIETY:		
Norton, Richard C., Miami Springs...	10.00*	....
DESOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY:		
Aurin, E. C., Ft. Ogden.....	10.00	....
Kirkpatrick, Charles H., Arcadia.....	10.00*	....
McSwain, D. L. (deceased), Arcadia..	10.00	....
Peacock, W. H., Wauchula.....	10.00*	....
Poucher, Allen A., Wauchula.....	10.00*	....
Pyatt, W. S., Bowling Green.....	10.00	....
Simmons, J. A., Arcadia.....	10.00*	....
Touchton, W. C., Avon Park.....	10.00	....
INDIVIDUALS:		
Paul, L. H., Bonifay.....	10.00	....
JACKSON COUNTY MEDICAL SOCIETY:		
Bertram, J. Willie, Bascom.....	10.00	7.50
Burns, M. Q., Blountstown.....	10.00*	....
Finlay, Davis H., Blountstown.....	10.00	7.50
Hodges, G. S., Marianna.....	10.00	7.50
Marshburn, E. R. (deceased), Marianna .....	....	7.50
LAKE COUNTY MEDICAL SOCIETY:		
Lodor, Charles H., Eustis	10.00	....
Morrison, Harry K., Leesburg.....	10.00*	....
Oetjen, LeRoy H., Leesburg.....	10.00*	....
LEE COUNTY MEDICAL SOCIETY:		
Johnson, M. F., Ft. Myers.....	10.00*	....
LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON COUNTY MEDICAL SOCIETY:		
Brevard, E. M., Tallahassee.....	10.00	....
Brinson, J. B., Jr., Monticello.....	10.00*	....
Cobb, Alva T., Chattahoochee.....	10.00	....
Daves, F. E., Chattahoochee.....	10.00	....
Gwynn, George H., Jr., Tallahassee...	10.00	....
Massey, W. W., Quincy	10.00*	....
Murrow, J. S., Apalachicola.....	10.00*	....
Watson, Francis M., Chiplev.....	10.00	....
Wilensky M. C., Chattahoochee.....	10.00*	....
Williams, J. F., Monticello.....	10.00*	....
Williams J. L., Tallahassee.....	10.00*	....

*Reinstated.

Name and Address.	1933	1934
DUVAL COUNTY MEDICAL SOCIETY:		
Blitch, Clifford G., Ft. McPherson, Ga.	10.00	....
Counts, H. W., Jacksonville.....	10.00	....
Furnish, Richard D., Omaha, Neb.....	10.00	....
Gwinn, V. H. (deceased), Jacksonville	10.00	....
Harwell, D. F., Jacksonville.....	10.00	....
Herlong, M. B., Jacksonville.....	10.00	....
McDowell, Walter, Evansville, Ind....	10.00	....
McLeod, R. F., Titusville	10.00	....
Roberts, Earl, Jacksonville.....	10.00	....
Sample, A. M., Jr., Jacksonville.....	10.00	....
ESCAMBIA COUNTY MEDICAL SOCIETY:		
Bickerstaff, James H., Pensacola.....	10.00	7.50
Hixon, F. P., Pensacola.....	10.00	7.50
McMillan, D. W., Pensacola.....	10.00	7.50
HILLSBORO COUNTY MEDICAL SOCIETY:		
Marney, Charles R., Tampa.....	10.00	....
MADISON COUNTY MEDICAL SOCIETY:		
Davis, George O., Madison.....	10.00*	....
Long, Eustace, Madison.....	10.00*	....
MANATEE COUNTY MEDICAL SOCIETY:		
Brown, J. O., Palmetto.....	10.00	....
Clark, George T., Bradenton.....	10.00	....
Harrison, M. M., Bradenton.....	10.00*	....
MARION COUNTY MEDICAL SOCIETY:		
Lane, W. K. (deceased), Ocala.....	10.00	....
ORANGE COUNTY MEDICAL SOCIETY:		
Coffin, C. E., Winter Park.....	10.00	....
Neal, T. A., Orlando.....	10.00*	....
PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY:		
Furlow, L. T., Brooksville.....	10.00	....
Hamblin, A. L., Valrico.....	....	7.50
PINELLAS COUNTY MEDICAL SOCIETY:		
Cranford, J. E., St. Petersburg.....	10.00	....
Kumm, F. F., Minneapolis, Minn.....	10.00	....
Morgan, William E., Tarpon Springs..	10.00	....
Sackett, Harry R., St. Petersburg.....	10.00	....
POLK COUNTY MEDICAL SOCIETY:		
Epling, Brady D., Lake Wales.....	10.00	7.50
Sample, J. R., Haines City.....	10.00	7.50
Wilson, C. H., Bartow.....	10.00	7.50
PUTNAM COUNTY MEDICAL SOCIETY:		
Ford, Edward W., Crescent City.....	10.00	....
Main, Daniel C., Pomona.....	10.00	....
Miller, W. S., Palatka	10.00	....
ST. JOHNS COUNTY MEDICAL SOCIETY:		
Stanton, Gordon, Hastings.....	10.00	....
SARASOTA COUNTY MEDICAL SOCIETY:		
Burgner, Blanche A., Sarasota.....	10.00*	....
TAYLOR COUNTY MEDICAL SOCIETY:		
Bryan, W. H., Scanlon.....	10.00*	....
Smith W. H. Y., Perry	10.00	....
VOLUSIA COUNTY MEDICAL SOCIETY:		
Bohannon, Clyde C. (deceased), Day- tona Beach	10.00	....
Esche, J. P. (deceased), Daytona Beach	10.00	....
Munson, A. S., DeLand.....	10.00	....
		\$750.00
Dues of Secretaries		225.00
		\$750.00
		\$322.50
		750.00
Total		\$1,072.50

*Reinstated.

ASSETS AND LIABILITIES

April 16, 1934.

Assets

Cash in Bank	\$ 6,713.05
General Fund—Accounts Receivable.....	990.00
Furniture and Fixtures (less depreciation)...	213.40
Library	121.10
Stationery Inventory	74.07
Savings—Barnett National Bank.....	7,952.75
Investment (Treasury Bonds).....	10,178.13

\$26,242.50

Liabilities

Journal—Accounts Receivable.....	18.70
Capital Account	26,223.80

\$26,242.50

Upon motion duly seconded the Association voted to adopt the above report as read. Unanimously adopted.

The following report of the Executive Committee was read by Dr. Leigh F. Robinson:

REPORT OF THE EXECUTIVE COMMITTEE

To the President and Members of the Florida Medical Association in Session at Jacksonville, Florida, April 30, 1934:

The Executive Committee held its initial meeting at Orlando on July 22, 1933. Various other meetings have been held throughout the year as were required and the committee acted in its executive capacity whenever necessary. Its initial action was the adoption of a budget for the ensuing year and the reappointment of Dr. Stewart Thompson as Business Manager. The dates for the present meeting of the Association in Jacksonville were chosen as April 30th, May 1st, and 2nd, in compliance with the Association's action to close the meeting at noon of the last day. The present dates were designated after being approved by the Railroad Surgeons and Roentgenologist Societies.

It has been customary in the past for the Executive Committee to act officially on applications for Honorary Membership after the same have passed the House of Delegates. Therefore, the committee approved the applications for Honorary Membership of the following physicians:

Andrew P. Albaugh, Tarpon Springs.

Charles L. Jennings, Jacksonville.

John D. Peabody, St. Petersburg.

At the regular meeting of the House of Delegates on May 2, 1933, the Executive Committee was instructed to take under consideration a plan whereby the Florida Medical Journal might possibly be combined with the Georgia and Alabama Medical Associations' Journals. After careful

consideration we believe that it is of the best interests to the members of this Association to continue the present policy of the publication of the Florida Medical Journal and therefore make this recommendation to the House of Delegates.

The committee agreed to underwrite expenses for the Post-Graduate Course of 1934 to the amount of \$500.00. A Finance Committee was appointed composed of Dr. Shaler Richardson, Dr. T. Z. Cason, and Dr. Stewart Thompson to handle all finances for the Committee on Medical Post-Graduate Course.

After careful consideration of the question of group malpractice insurance, we voted to recommend the policies of the Aetna Life Insurance Company of Hartford, Connecticut, to this Association as giving satisfactory insurance coverage at prices deemed reasonable, and voted that the following resolution be brought up for the action of the House of Delegates at this meeting.

WHEREAS, the Aetna Life Insurance Company, of Hartford, Connecticut, has offered to issue its policies, at rates deemed satisfactory to the Executive Committee, to give liability insurance protection to members of this Association; and said Company has requested this Association to recommend said policies to its members; and

WHEREAS, after full investigation, it has determined that this House of Delegates should comply with said request and recommend said policies to the membership;

NOW, THEREFORE, BE IT RESOLVED, That this House of Delegates does hereby recommend the policies of said Aetna Life Insurance Company to the membership of this Association as giving satisfactory insurance coverage, at prices deemed satisfactory;

RESOLVED FURTHER, That this recommendation supersede all previous recommendations with reference to such insurance.

In view of the fact that the reduction of state dues to \$7.50 did not become effective until January 1, 1934, the committee designated that date for the voluntary elimination of all salary by Dr. Shaler Richardson, secretary, treasurer, and editor of the Journal, and voluntary reductions in salary of the Business Manager and stenographer.

Since the state dues of the Association have been reduced to \$7.50 action was taken to require essayists having articles published in the Journal of the Florida Medical Association personally to bear all expense in connection with electrotypes to illustrate articles. For some years past, the Association has borne one-half of this expense.

The question of seating delegates and visiting members of the Association during sessions of the House of Delegates has been carefully

worked out and we recommend that the following changes in the By-Laws be adopted at this meeting of the House of Delegates. At present Chapter III, Sec. 3 of the By-Laws reads as follows:

"A majority of the registered delegates shall constitute a quorum, and all of the sessions of the House of Delegates shall be open to members of the Association."

The following shall be added to this section of the By-Laws as quoted above:

"Ample seating facilities shall be arranged for the House of Delegates, separate and apart from the seating facilities provided for visiting members of the Association."

The following new By-Laws shall be added to Chapter III as follows:

CHAPTER III, Section 16. Each delegate representing a component society, before being seated, shall deposit with the Association's secretary or his duly authorized representative, a certificate signed by the secretary of his component society, stating that he has been regularly elected a delegate by that component society. All delegates shall report at the registration desk upon arrival at the state meeting, exhibit their credentials and receive instructions regarding the meeting place and time of the House of Delegates.

CHAPTER III, Sec. 17. A delegate whose credentials have been accepted and whose name has been placed on the roll of the House shall remain a delegate of the body which he represents until final adjournment of the session and his place shall not be taken by any other delegate or alternate.

The creation of an inter-relationship committee composed of members of the State Medical, Dental, and Pharmaceutical Associations, as outlined in the Presidential address, has been considered and we believe that bringing the three Associations together to work out their common problems will obtain the results that the President has described in detail.

We recommend that the House of Delegates authorize the incoming President to appoint a committee for the study and control of venereal diseases, feeble-mindedness and allied subjects as detailed in the President's address, and that the committee be instructed to report its findings to the 1935 meeting of the House of Delegates.

Some time ago the Executive Secretary of the Tuberculosis Association contacted the President, President-elect and members of this committee and requested that a committee be appointed by the State Medical Association to act upon medical matters that come before the Florida Tuberculosis and Health Association. The President in his address has outlined the benefits that may be derived through the appointment of such a committee. Therefore it is recommended that the incoming President appoint a committee of five, whose respective terms shall run for five,

four, three, two, and one years, with the vacancy filled each year, to handle this matter.

Respectfully submitted,

LEIGH F. ROBINSON, Chairman;
EUGENE S. GILMER,
WILLIAM H. SPIERS,
W. M. ROWLETT,
SHALER RICHARDSON.

Upon motion, duly seconded, the report of the Executive Committee was unanimously adopted.

Dr. S. E. Driskell, Chairman of the Committee on Legislation and Public Policy, read the following report:

REPORT OF COMMITTEE ON LEGISLATION AND PUBLIC POLICY

As stated in a recent issue of the Journal the activities of your Committee on Legislation and Public Policy were confined largely to the last few weeks of the 1933 session of the legislature.

You recall the alertness of the cults in their efforts to secure legislation giving them equal privileges with our profession in all hospitals supported wholly or in part by public funds. They were successful in having Bill No. 774 given favorable report by the Public Health Committee of the House, which provided the above privileges and in all probability would have become a law had it not been for the united efforts of our profession throughout the state. A member of the Public Health Committee of the House who supported this bill stated that the allopathic profession were narrow and that he could not understand why we were not willing to go along and work side by side with these individuals.

Another ambiguous bill introduced in the House provided for a chiropractic inspector to go over the state and secure data that he might be able to determine the vegetative matter as related to the spinal cord. This inspector was to make his report to the State Board of Health; the State Health Officer was to co-operate with said inspector. This was known as House Bill No. 45.

An administration workmen's compensation bill was introduced. In many respects this bill was favorable to our profession but the maximum fees allowed for medical and hospital care of injured were inadequate; however the fees permitted for regular office work and house visits were in accord with usual fees in a given com-

munity. We are in favor of this type of legislation but it is rather doubtful whether we will ever have a workmen's compensation act in this state.

There was the usual effort made to change our Practice Act, in that it should be compulsory on the part of the Board of Examiners to recognize licenses from other states. It might be advisable to more clearly define the practice of medicine to cover the use of x-ray and the various electrical appliances. By so doing we might be in a position to prevent the unqualified from using these highly technical instruments. Also, it might be well to state all applicants shall be full citizens of the United States before being admitted to the examining board.

During the year the Board of Medical Examiners examined 86 applicants, six of whom failed; 46 applications were denied. The grounds for rejection of these proposed candidates for license were based on their being graduates from low grade medical schools; the next largest number were rejected because of being political refugees from foreign countries who were unable to speak or write the English language; and the third group came in the category of those having been in the clutches of the law in some other state and their licenses revoked.

During the year the Board of Medical Examiners were called upon to grant a temporary certificate; this was denied and we earnestly request that this Association support the board in refusing to grant temporary licenses as we believe such procedure would not be to the best interest of organized medicine.

The question arises as to the best procedure in handling graduates of foreign medical colleges whose standards are not on a par with our American colleges. Foreign countries reported enrollment for 1933 of 1,911 American students. A professor from one of these schools reported that almost invariably these students are of a quality below what he was accustomed to seeing in the American medical student and on the whole not a particularly satisfactory group. It will be readily understood what effect this type of student will have upon our profession when allowed to practice in his chosen state. At present there is a tendency not to admit these graduates to our board. Florida has been rather strict on this type of individual and we believe with the support of this Association our board will soon reject all applicants from foreign schools unless they can

show certificates setting forth two year's pre-medical work and a diploma from a foreign school of the same high classification as our American schools.

Since the cults were unsuccessful in their effort to enact certain laws during the 1933 session of the legislature we feel that there will be a concerted effort during the 1935 session to create legislation that will elevate these various cults. In order to do this be not surprised if there is an effort made to have a referendum to legalize the various cults, giving them the same privileges as our own profession. Therefore, we suggest that each of you familiarize yourself with the aims and ambitions of the various candidates for the House and Senate and, if possible, secure a pledge from these candidates that they will not support any new medical legislation until you have first had an opportunity to review the bill and render an opinion. The unused voting power of the medical suffrage could, if properly applied, bring about almost any change desired.

Your committee endorses the credentials bill sponsored by the 1933 administration and recommends that the incoming administration lend wholehearted support to the Woman's Auxiliary in their effort to pass this bill at the 1935 session of the legislature.

Your committee lent its support to the narcotic division of the U. S. government in sponsoring and the enactment of a state's uniform narcotic act.

In view of the ever-increasing number of automobile accidents and the inability, or the unwillingness, on the part of those involved to pay for medical and hospital care we feel that an effort should be made at the 1935 session of the legislature to enact a law to make it mandatory on the part of insurance companies carrying coverage on those proven responsible for the accident to pay for medical, hospital and nurses' care before any settlement is made with the individual.

We wish to commend the attitude of the profession in caring for the sick indigent through the Federal Relief, and especially do we want credit given to those individuals who have given of their time and talents to the various agencies under the direction of the relief boards throughout the state in working up and arriving at a stipulated fee to be charged for looking after the indigent sick. Even though the remuneration has not been commensurate with time and work required, we feel that the physician and the

patients are in much better condition both financially and physically than they would have been had this program not been worked out.

Respectfully submitted,

COMMITTEE ON LEGISLATION AND
PUBLIC POLICY.

S. E. DRISKELL, M.D., Chairman;

JULIEN C. PATE, M.D.,

CORBETT E. TUMLIN, M.D.,

HUGH S. GEIGER, M.D.,

ARTHUR L. WALTERS, M.D.

The above report of the Committee on Legislation and Public Policy was accepted by unanimous vote.

The following report of the Committee on Hospital and Medical Education was made by Dr. Robert C. Woodard of Miami:

REPORT OF THE MEDICAL EDUCATION AND HOSPITAL COMMITTEE

The hospitals of Florida, during the past year, have been facing possibly the most strenuous times in their history, in that many of them being privately owned have had to depend entirely upon funds received from hospitalization of patients that they might carry on. However, it is the opinion of your committee that the hospitals of this state deserve much commendation for maintaining their standards in the face of an ever increasing financial handicap.

It seems from the investigations made by your committee that the fully approved hospitals of Florida, for the past year, have remained practically unchanged under these trying financial conditions. There are many hospitals that have not been fully approved and a few conditionally approved all of which, in a measure, has been due to lack of funds to carry on.

There have been some reports submitted to your committee of hospitals trying the group insurance plan, but this committee is not as yet prepared to endorse or condemn this practice. In a recent report from two hospitals of this state, on the group insurance idea, one condemns it very strongly and the other hospital claims not to have gone far enough with the proposition to give it full endorsement. However, it seems to your committee that many hospitals are not prepared, owing to local conditions, to go into the group hospital plan, while others located in cities of a more industrial character may see

their way clear in installing this system, as somewhat at least of a break-even basis.

It appears to your committee that the hospitals of this state stand in need of encouragement and are deserving of the fullest cooperation of the medical profession, which your committee feels sure they will receive.

The training school problem is one that the hospitals are continually facing and it has been necessary for some of the hospitals to discontinue their training school for nurses. There are two reasons for this action, one of which is a question of finances and the other is the problem of oversupply of the nursing profession in Florida.

Respectfully submitted,

R. C. WOODARD, M.D., Chairman;

WALTER A. WEED, M.D.,

H. F. WATT, M.D.

The above report was accepted by unanimous vote.

The report of the Council was read by Dr. Walter C. Payne, as follows:

REPORT OF COUNCIL

Whereas, 500 licensed physicians in Florida are not affiliated with county or state societies, and

Whereas, in almost every county society past members have dropped out or newly licensed members have never affiliated, because they have never realized the advantages of organized medicine nor received appreciable benefit; therefore, be it

RESOLVED, That the Council recommend some definite action by the State Association to offer inducements to non-member physicians in the state to associate themselves with organized medicine and would suggest—

1st. A state-wide campaign of ethical publicity, run in a selected group of influential newspapers and journals to cover the entire state. This campaign to be financed by the State Association.

2nd. That the State Association actively support the county societies in all ethical movements toward the economic improvement of their membership and distribute to the county societies information concerning programs that have proved advantageous in other county societies.

3rd. That this Council appoint a committee to consult with an advertising specialist with a view to ascertaining costs and getting ideas, to report at a later meeting of the Council to be

held just preceding the state meeting. It is understood that this action is without obligation on the part of the Council or the State Association.

WALTER C. PAYNE, Chairman.

It was moved, seconded and carried that this report be adopted as read by Dr. Payne.

Dr. Eugene Peek of Ocala then read the following report of the Committee on Necrology:

REPORT OF COMMITTEE ON NECROLOGY

During the past year, our Association lost, by death, the members whose names are listed below:

Clyde C. Bohannon, Daytona Beach
John E. Boyd, Jacksonville
Cole Carroll, Apopka *
Joseph P. Esche, Daytona Beach
Thomas D. Gunter, West Palm Beach
Van Henry Gwinn, Jacksonville
*James M. Hartley, Hollywood
*Roscoe C. Hubbard, Tampa
Thomas F. Jackson, Dade City
T. Byron King, Gainesville
William K. Lane, Ocala
William J. Lee, Panama City
Eugene R. McMurray, Bartow
Cyrus J. Marshall, Sanford
Eustis R. Marshburn, Marianna
*John W. Mitchell, Sebring
Leon A. Peek, West Palm Beach
Emory W. Peery, West Palm Beach
George R. Plummer, Key West
H. Mercer Richards, Lakeland
William B. Winkler, Ft. Myers

Where possible, obituaries have appeared in the Journal relative to the deaths of these doctors. Tributes have been paid to them in the different communities where they practiced.

May we, at this time, stand in a moment of silence, in reverence and respect to the memory of our departed colleagues.

EUGENE G. PEEK, Chairman;
MOZART A. LISCHKOFF,
GEORGE W. POTTER,
JAMES L. ESTES,
BASCOM H. PALMER,
JOSEPH HALTON,
R. HENRY BALDWIN,
HARRY C. GALEY.

*Not a member of the Association at time of death but was a former member.

The members of the Association then stood for a moment in silent respect to their departed colleagues.

Dr. Rowlett: "The Recording Angel's record has been appalling this year. The names of twenty-one members were read. As I sit here and look over this meeting it does not seem just the same. For twenty years, on these two end seats, sitting side by side, were those two most lovable characters; staunch and loyal to our Association here, our two Johns, Dr. John Helms and Dr. John Boyd. I know that right at this moment, sitting side by side in Heaven, they are looking down upon this meeting. And I hope that next year the Recording Angel will be more lenient to us."

Dr. J. Ralston Wells, Secretary of the Committee on Public Relations, read the following report of that committee:

REPORT OF COMMITTEE ON PUBLIC RELATIONS

The several meetings of this committee held during the year were not as well attended as your Chairman would have desired, but the following report will give a scope of the work accomplished.

The Florida Medical Association has a standing Committee on Public Relations. The members of this committee are appointees of the President of the State Association, and have a rotating membership, so that individual member's appointments expiring and new ones being made, at no time allows the entire committee to pass out of office, or to be reappointed. This committee has been in existence since 1931, inclusive, and is working on a several year program that includes a radio broadcasting bureau, speakers' bureau, press bureau, and motion picture bureau.

The radio broadcasting bureau, which is directly responsible for radio talks over Station WRUF, Gainesville, has been running smoothly, with an occasional exception. These talks are given by members of the Florida Medical Association, over the caption of Florida Medical Association, without the individual's name being mentioned. For the fall-spring 1933-34, there were 18 talks, spaced approximately two weeks apart, to be delivered. The subject matter for these talks was in sequence, and was plotted out by your committee in advance of the entire program. In addition, this committee is indirectly

sponsoring radio broadcasts from county medical societies, in counties where there are broadcasting stations. The committee files contain a considerable library of short subjects and articles which are loaned to the component county societies for use as such, or as a basis for suggestions for talks along similar lines.

Speakers' Bureau: This bureau is a base from which requests for speakers from component medical societies to address professional or lay audiences are answered. This bureau, while organized, is not running in a regular form as yet.

Press Bureau: This bureau was established in 1931. Several methods were used to induce the various newspapers in the state to take up articles written especially for them, and released weekly by this committee. There was no method found that proved efficient. Publishers of various newspapers took the attitude that the Florida Medical Association as a whole, or the Doctors as a group, was attempting to obtain free advertising space, although they, the publishers, received articles of timely interest, written in a popular vein, and in addition they were informed it was an educational idea, humanitarian in object. Some rather severe criticisms were made by several presses. The time, energy, and expense in writing, editing and distributing these articles was considerable, and their use by newspapers was so little that the 1933-34 Public Relations Committee voted to discontinue this bureau temporarily.

Motion Picture Bureau: This Bureau has on file a considerable list of motion picture films on medical and medical education subjects, that have been collected from various sources. This committee furnishes information to component county societies as to where they can obtain films they might wish, and under what terms.

The various county medical societies, as a whole, have not realized the value that the files of this committee would be to them in arranging programs, and furnishing basic thoughts for symposiums, securing motion pictures, etc., etc. The files of the committee are steadily increasing in material and they are of intrinsic value to the State Association, which of course should be taken to mean each component county society. It is to be hoped that the rest of this year and on into 1935 will show an increased amount of interest in this committee by the county societies.

It is becoming more evident as time progresses, the various governmental agencies being formed,

and various cults becoming more prominent, and aggressive, that the medical profession needs speakers of worth who can and will voluntarily serve to distribute the funds of medical knowledge throughout the state, particularly to lay audiences. The speakers' bureau already has a place in this committee, and only needs the incentive from various county societies to go forward more rapidly.

We recommend a membership liaison or a closer relationship between this committee and the Medical Economics and other state committees dealing with the public's education on medical subjects, medical aims and medical viewpoints.

Respectfully submitted,

HENRY C. DOZIER, Chairman;
RALSTON WELLS, Secretary;
HUBERT A. BARGE,
THOMAS C. BUCKMAN,
JULIUS C. DAVIS,
H. MASON SMITH.

On motion made and seconded the above report was accepted by unanimous vote.

Dr. T. Z. Cason read the following report of the Committee on Post Graduate Work:

REPORT OF COMMITTEE ON MEDICAL POST GRADUATE COURSE

The report of last year's Short Course for Doctors of Medicine in the State of Florida, under the auspices of this organization, was made in detail in the official organ of the Association, the Florida Medical Journal. Those of you who attended and those of you who have had personal communication with the ones in attendance will understand that the course was more successful even than the report indicated.

Financially, the course was successful to the extent that it was not necessary to draw on the funds guaranteed by this Association. It is evident from the number of inquiries we have received that other states have considered similar courses, but apparently Florida has been a leader and our experiment unique in some of its aspects.

The next Short Course has been arranged for the week of June 25 to 30, inclusive. We believe the program is better than last year's. We have tried to leave out all minor courses of one and two lectures. For instance, in the case of Laboratory Technique, the State Board of Health is to set up the minimum ideal laboratory and fur-

nish with it a technician who will be on duty to give information and instruction during the entire week. A five-lecture course on Venereal Disease has been added. The meetings this year will be held in the P. K. Yonge Laboratory Building which has just been completed and which represents the last word in equipment. The building itself is worth the time necessary to inspect it.

Your committee has for two years been making a careful study of the question of having a winter course of from four to six weeks beginning January 15. We plan, briefly, to make this a highly specialized course as well as one instructive to the general practitioner. The lecturers would deliver a minimum of 12 lectures on each subject. The course would be open to any ethical practitioner of medicine in the United States and Canada. It is also proposed to open this course to the English-speaking doctors in Latin-America. We have been assured by a sufficient number of specialists of national reputation of their cooperation and willingness to give the lectures without remuneration beyond actual expenses to guarantee the success of the winter course.

These plans have been discussed with Dr. John J. Tigert, President of the University of Florida, who has written me, expressing his enthusiastic approval and offering to send the professor of Pan-American Affairs to the Latin-American countries for six months to advertise this course. It is the opinion of the committee that such a course offers an opportunity for Florida to contact Latin-America in a way that would not only cement our friendly international relations but increase our scientific prestige in those countries.

It has required a great deal of time and no little effort to produce a course with the high standards of that of last year and the one we are offering this year. It has been our pleasure to serve you.

COMMITTEE ON MEDICAL POST GRADUATE COURSE.

T. Z. CASON, Chairman;
THOMAS H. BATES,
M. JAY FLIPSE,
GEORGE C. TILLMAN.

On motion made and seconded the above report was unanimously adopted.

The following report of the Committee on Cancer Control was read by Dr. Gerry R. Holden:

REPORT OF COMMITTEE ON CANCER CONTROL

Soon after this committee was appointed a preliminary meeting was held in Orlando to discuss the general plans under which the program would be carried out.

In order to facilitate the work the state was divided as equally as possible into five districts, and one member of the committee was assigned to each district. Each member had supervision of that district to which he was assigned. This plan seems to have worked fairly well and probably will be continued for the future.

The committee felt that the work this year was really preliminary in character and did not attempt to develop every possible phase.

With the aid of the councilors and the program committees of the various county societies, the societies were asked to arrange for symposia on the topic of cancer. While in many instances the responses to these invitations were slow in coming in, at the same time we have had, during the year, cancer symposia in the majority of the larger county societies.

According to the records of this committee symposia have been held in the following counties:

Alachua; Columbia, with physicians from Madison, Suwannee and Lafayette invited; Dade; Duval, including Clay and Nassau; Escambia; Lake; Lee; Marion, with physicians from Levy, Citrus, Sumter, Lake and Alachua invited; Orange; Palm Beach; Okaloosa; Pinellas; St. Johns; Tri-County, including Hardee, Highlands and DeSoto; Volusia and Walton.

This list is complete as far as this committee knows. If there is any error in it or in any other statement in this report the committee would appreciate notification thereof.

Material for these symposia has been furnished by the American Society for the Control of Cancer to help in putting these programs over and it is believed that they have been stimulating and helpful to the members of the various societies.

Work has also been done with the hospitals and the nurses throughout the state. The American Society for the Control of Cancer issues a very valuable booklet for nurses on the subject. With the kind assistance of Mrs. Louisa B. Benham this booklet has been made a standard in most of the nurses training schools in Florida. Copies of it have also been distributed to many

graduate and under-graduate nurses throughout the state.

It is gratifying to note that the nurses and hospital superintendents throughout the state have given us most valuable cooperation and have shown great interest in the subject.

We have fostered some newspaper publicity on the subject. Excellent newspaper releases were sent us by the American Society. These were in part turned over to the Public Relations Committee for its use. But in West Palm Beach releases were published under the supervision of Dr. Herpel, the member of the committee for that district, and in St. Johns county under the supervision of the St. Johns County Medical Society.

The committee has endeavored, with some success, to arrange for meetings and talks before the laity regarding the diagnosis and importance of the early symptoms of cancer. While in some parts of the state nothing has been done in this way, in other portions very successful meetings have been held. Volusia county held a "Cancer Week" under the auspices of the Cancer Control Committee of its county society. Addresses were delivered, slides and moving pictures shown before lay organizations in Daytona Beach, New Smyrna, and DeLand. Similar meetings with lay organizations were held in Pensacola, Lake City, West Palm Beach and Stuart.

A certain amount of success has been obtained with radio broadcasts. Broadcasts have been given from stations in Gainesville, Orlando, Miami, and Tampa.

Much of the work of this committee has been experimental this year, trying to find what we can do and how we can do it. We feel that next year we shall be in much better position to obtain results.

We wish to acknowledge the great help and stimulus which has been given us by the American Society for the Control of Cancer as well as by Dr. Cox, the representative of this society for the southeastern states. We have been supplied with lantern slides, projectors, and moving picture films for both lay and professional audiences, as well as a large amount of literature and leaflets. All of this material has been given us without charge. As a matter of fact the State Association has had no expense in the activities of this committee except to supply a certain

amount of official stationery which was essential for our work.

The committee feels that the most important objects for the ensuing year are; first, the approach to the laity through addresses, the radio and the press: and, second, a consideration of a system of diagnostic cancer clinics for indigent patients throughout the state.

We believe that with the cooperation of the councilors as well as with the cooperation of various lay organizations which have manifested interest in this movement we should be able to accomplish much with regard to the approach to the laity.

The question of diagnostic cancer clinics is a difficult problem. Nevertheless, it seems probable that such clinics will at some time be established in our state. For the protection both of the profession and the patients such clinics should be under the control of organized medicine. Your committee will do its best toward solving this problem of cancer clinics. As an aid to this, as well as to other phases of the work in cancer control, we would urge that the societies, especially the larger county societies, appoint local cancer control committees with which the state committee can work and confer as may be necessary.

Respectfully submitted.

COMMITTEE ON CANCER CONTROL.

G. R. HOLDEN, Chairman;
J. C. DICKENSON,
F. K. HERPEL,
J. M. HOFFMAN,
GERARD RAAP.

It was moved, seconded and unanimously carried that the above report be adopted.

Dr. O. O. Feaster, Secretary of the Committee on Medical Economics, then read the following report:

FINAL REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee on Medical Economics of the Florida Medical Association, in addition to the work done by its individual members, has had six meetings during the year: two in Jacksonville, three in Tampa and one in Orlando. Two of these meetings were open to the membership generally. Fifty-two doctors attended in Orlando. All of these and others were invited to be present at the succeeding session in Tampa and about sixteen were present.

The September and October, 1933, Journals of the Florida Medical Association contained the committee's preliminary reports. The first of these called attention to certain general problems confronting the profession from an economic angle. The second outlined the efforts of the committee to secure the most satisfactory arrangement possible for compensation of physicians for services rendered the wards of the Federal agencies.

It further recommended a plan for the care of indigents whose care should be the responsibility of county and city governments and offered other suggestions as follows:

"I. Other Indigents.—That each county society seriously consider contracting with its various municipal and the county governments to furnish medical services to the indigents of these political units; that the county society supervise the service rendered and that the funds received from such contracts be paid into the society's treasury to be used for the scientific, economic and social interests of its members.

"II. School Children.—That there be no free examinations or vaccinations of children by county society members. Those who are indigent should be provided for as suggested in the preceding paragraph. Those who can pay should secure the services from the family physician.

"III. City and County Physicians.—We believe that it is impossible for any man, no matter how honest and conscientious he may be, who is serving as part-time employee of the county or city and part time in private practice to be able to render adequate service when his private income is being neglected.

"We therefore recommend that county and city physicians be paid an adequate salary and that they not be allowed to do outside practice for which they expect to receive remuneration, and that these physicians be required to render their services only to such patients as have been investigated and found to be without the non-necessities. In this way those physicians who are now overburdened with charity work will receive adequate salaries, allowing them to devote their full time to it, and will relieve the private practitioner of such work as we now find it impossible for the county or city physicians to take care of.

"IV. Newspapers.—That county societies take under serious advisement at an early date the newspaper program suggested in the committee's

preliminary report (par. 2, page 127, Fla. Med. Jour., Sept., 1933).

"V. Insurance.—(For the details of the provisions of this paragraph, you are referred to page 171 of the October, 1933, Florida Medical Journal)."

It is now desired to call to your attention certain very important aspects of the economic situation that directly or indirectly affect the financial welfare and community standing of the membership of this Association.

FRAUDULENT DOCTORS OF MEDICINE

There are estimated to be some twenty to fifty men legally licensed to practice medicine in the state who obtained their credentials through fraud. In one city of thirty-five or forty thousand there are known to be at least three. These men give evidence of acquiring thousands of dollars in professional fees that rightly belong to properly trained, ethical, competent and legitimately licensed physicians. There should be concerted and energetic action on the part of this Association, the several county medical societies, the civil officials and last, but certainly not least, on the part of our State Board of Medical Examiners to attempt to correct this evil. Not only to protect itself from an economic angle, but also to prevent its good name and community standing from being damaged by their frequent unethical and incompetent practices, should the profession strive to rid its ranks of these vultures. Furthermore, the public's confidence which we enjoy obligates us to take steps to protect it from an evil of which it can not be expected to be aware—or failing in that—to acquaint it with the facts in no uncertain terms. It is recommended that the Florida Medical Association take official cognizance of this state of affairs and that it bring the matter formally to the attention of the Governor of the State of Florida, to the prosecuting attorneys of the several courts, and to the State Board of Medical Examiners; and, further, that while pledging its every support in cooperating to eliminate this evil, it at the same time bring all possible influence to bear upon these officials to stimulate activity toward this end where indifference has existed in the past.

UNTRAINED PRACTITIONERS

As proof of our indifference and our lack of organized and effective efforts for the protection of ourselves and a public for whose welfare we are, by time honored heritage, responsible, are

the existence of several cults licensed by the Acts of recent State Legislatures. Consider the position of one of these—its licensees yesterday were nurses, chiropodists, drug clerks and other lay people who today, without any scientific training during the night, enjoy essentially the same privileges as doctors of medicine. The State of Florida, through this cult's examining board, permits these untrained and medically ignorant laymen to declare themselves to be capable of diagnosing and treating the sick. They are permitted to prescribe drugs, the action and danger of which they are perforce ignorant. Because of the state's action, the Collector of Internal Revenue of Florida, in a recent communication, advised this committee that he had no alternative but to issue them, upon application, federal narcotic licenses. Surely no more unsightly monument has ever been erected to commemorate the indifference and ineffectiveness of the Florida Medical Association, for is there anyone who doubts that this organization, with the loyal support of its thousand members, could have prevented this legislation?

ALIEN PHYSICIANS

It is understood that a number of physicians are practicing in Florida who are aliens. It is recommended that an effort be made to secure such legislation as will make citizenship a prerequisite to a license to practice medicine.

UNETHICAL PRACTITIONERS

The standing of the profession in the eyes of the public is greatly enhanced and its economic situation is appreciably bettered when the licenses of doctors guilty of illegal practices are promptly revoked. The State Board of Medical Examiners has been commendably active in this respect where these individuals have been convicted in the courts.

MUTUAL BENEFIT SOCIETIES

Your committee wishes to call your attention to the existence in this state, especially in a west coast community, of a number of mutual benefit medical societies. Some of the societies are reputed to be owned and controlled by doctors, and the larger ones by the benefit societies and their duly elected executive bodies. All of the officers are laymen.

We are informed that they build hospitals, hire doctors on a salary basis and also contract certain highly specialized branches of medicine to the lowest bidding doctors. That the society sets the fee and asks for bids. By this method

of chiseling down fees they are able to continue to operate at the expense of the medical profession; a thing to be condemned.

Calls we are told are made by their hired doctors on a scale of twenty-five to thirty cents each based on the doctor's salary. Some of these societies are said to have a membership of ten thousand members, and are affiliated with similar or parent organizations in Cuba or Spain and many of their ventures are financed by foreign capital from the parent societies. It is these societies that have caused strikes among the Cuban physicians.

The mutual benefit societies prevent the free choice of physicians, encourage competitive bidding, and treat patients in a wholesale manner by their hired doctors, all of which is unfair to the patients and tends to produce "sweatshop" competition among doctors.

WORKMEN'S COMPENSATION LAW

It is quite probable that, in the future, a Workmen's Compensation Law will become effective in this state. Obviously this will be of serious economic interest to the medical profession. In anticipation of this and to protect our interests it is recommended that the Association, through its Executive Committee, request the Governor of the state to appoint a committee consisting of representatives of labor, employers and the Florida Medical Association to study the provisions of an acceptable Workmen's Compensation Law for the State of Florida.

INDISCREET PRACTICE

It has been brought to the attention of this committee that some ophthalmologists have been accepting rebates from prescriptions filled and refilled by certain manufacturers of optical products. This practice unquestionably has some of the earmarks of fee splitting and, to say the least, as it becomes more generally known, is sure to detract from the good name of the profession and such lessening of public confidence is economically unsound.

The committee feels that the physician is indiscreet who uses a prescription blank bearing the name of a druggist. It encourages the belief among a type of laymen that the doctor has a financial motive for expressing a preference for individual druggists, hospitals or undertakers.

HOSPITAL COMPETITION IN MEDICAL PRACTICE

There is increasing evidence of the intention of hospitals to compete with the physician in the

practice of medicine. The following examples are cited:

(a) By encouraging minor accidents and even walking medical cases to apply for treatment, using staff physicians to compete with themselves and their fellows by summoning these doctors to the institution to treat these cases instead of sending them to doctors' offices. Often the physician is able to collect no fee for his services while the hospital does collect a fee for dressings or drugs. Not infrequently these cases return to the institution for future dressings by a nurse, for which service the hospital receives a consideration.

(b) By the use of nurses and other lay people to administer anesthetics for major and minor surgery, the institution receiving a fee for the service and depriving a physician of a consideration for services that is properly his. Frequently the fee is of such amount as to fully recompense a doctor. This, of course, can only happen with the consent and encouragement of hospital medical staffs, particularly the surgeons. An argument that they use in justification is that the lay anesthetist is frequently more competent than the average physician. If this be true, it is equally true that loyalty to one or more doctors who wish to become anesthetists in each community of any size, and it is in the larger communities that this abuse exists, would develop well-trained physician anesthetists who would be more reliable and better able to combat emergencies than the lay employee.

(c) So many lay laboratory technicians are employed by institutions that several communities are deprived of the services of trained pathologists, who do not find sufficient income available to justify locating in these fields, to the detriment of doctors and patients. Again this practice can only exist through the tolerance of the physicians.

A letter, in reply to an inquiry of this committee, from Marks, Marks, Holt, Gray & Yates, the retained counsel of the Florida Medical Association, states in part:

"It is our opinion that the statute referred to prohibits nurses and other lay people from administering anesthetics unless administered under circumstances falling within the exceptions contained in the statute; for we think anesthetizing is essentially a very important part of the practice of medicine and is a service which may be lawfully rendered only by a duly licensed and registered practitioner."

The exceptions referred to relate to:

"... 'any office assistant of a legally licensed practitioner of medicine, rendering such assistance as is

usually rendered by a nurse, and who shall work only under the direct supervision and express orders of his or her employer in his office, and not otherwise.'"

And again:

"With reference to such persons doing phases of a pathologist's practice, such as making blood counts, bacteriological diagnoses, etc. a simple answer is difficult because the question involves such a great variety of circumstances and situations. The distinction between the 'best' way and the 'legal' way should be borne in mind; and the fact that it might be better for a registered physician to perform a certain service is not decisive of the legality of the performance of the service by some one other than a physician.

"It is our opinion that a nurse or other qualified person not a physician may lawfully make a routine examination, such as a blood count, where the report and finding based thereon contains no diagnosis of disease, but only a statement of facts; as for example, a mathematical calculation of the nature and kind of blood cells in the specimen.

"It is also our opinion that certain routine examinations of urine do not constitute 'practicing medicine' within the meaning of the statute; but if the examiner undertakes to diagnose and advise, he then enters upon the practice of medicine.

"The bacteriological diagnoses made by bacteriologists are not necessarily unlawful because constituting the practice of medicine. We refer to examination of water, soil, etc. On the other hand, the examinations of specimens of human tissue, even when the report made contains nothing more than a count of bacteria, may constitute practicing medicine; and certainly in our opinion such an examination and report constitutes practicing medicine within the statute when a diagnosis of disease is attempted.

"On account of the wording of our statute, the question is not free from difficulties; and as you may deduce from the foregoing opinion each case that arises must be decided upon the particular facts and circumstances that are involved."

(d) In some communities lay x-ray technicians are supplanting medical roentgenologists. In at least one community a lay technician is permitted to do roentgen therapy. Hospitals are receiving the same fees, in many instances, for these technical services that trained roentgenologists are paid for their consultations. It is superfluous to mention the menace to health, and even life, from the lay practice of x-ray therapy.

(e) By the practice of hospitals in having nurses take blood pressures at fees of fifty cents to three dollars for patients who apply for this service.

(f) By many hospitals in using these lay people to make basal metabolism tests at fees equal to those charged by physicians in private practice.

These are only a few of the ways in which hospitals are encroaching on the field of medical practice. Some are fraught with danger to the patient, some result in charging the patient regular doctor's fees for inferior services, and some are quite harmless. All are depriving some physician of income that should be his, legally and morally. Not one of these abuses can exist

but with the knowledge, consent and connivance of the medical profession, in definite disloyalty to the profession in general and some brother practitioner in particular. If medical staffs would discountenance such practices, they would cease. If the surgeon would refuse to use any but medical men, the lay anesthetist would disappear and more doctors would become expert in this field. If the staffs would refuse to treat walking cases at the hospitals, these patients would appear at their offices. If physicians would refuse to support lay x-ray and clinical laboratories, they would find themselves helped by the consulting services of trained physicians in these fields. If they would refer their basal metabolism patients to a fellow physician doing this work, they would help him economically and mutual trust and confidence would be engendered. The lack of trust among physicians is obviously unjustified and deserving of severe condemnation.

HOSPITAL INSURANCE

Hospitals in other states have instituted insurance features, on a monthly payment basis, to supply hospitalization and certain medical services to families and individuals. At least two institutions are known to be considering such a plan in this state. Insofar as the sale of board, bed and nursing is concerned, your committee feels that this is none of the medical profession's concern for this is the rightful business of these lay corporations; but where such contracts promise to furnish certain medical services such as medical and surgical services and certain x-ray and clinical laboratory services, it is distinctly the affair of the profession. If these organizations are permitted to employ salaried housemen for emergency services, salaried roentgenologists and pathologists, and sell their services at a profit to the institution in unfair competition with the doctor in private practice, what is to prevent their hiring surgeons, internists, dermatologists, neurologists, ear, eye, nose and throat men, and all other specialists similarly? Certainly the public will encourage and support such a plan. This is believed to constitute a sufficiently potential menace to the economic welfare of the profession that this committee asks that the following resolution be presented to the House of Delegates:

Whereas, there is evidence that some hospitals contract to furnish certain medical services and that they enter into certain phases of medical practice;

THEREFORE, BE IT RESOLVED: (1) That the Florida

Medical Association, by action of its House of Delegates, hereby instructs its Medical Education and Hospital Committee to withdraw or refuse approval to any Florida hospital which offers to furnish any phase of medical practice; (2) that the Florida Medical Association officially petition the American Medical Association and the American College of Surgeons to withdraw or refuse recognition to any and all hospitals offering such services; and (3) that the Florida Medical Association instruct its officers and its Legislative Committee to become active and energetic in having passed by the Legislature of the State of Florida such laws as shall specifically define as practice of medicine: anesthesia, x-ray diagnosis and x-ray therapy, and such other branches of the practice of medicine as are being abused by hospitals, and that the Florida Medical Association, as an organization, and its members, as individuals, lend their influence to secure the passage of such legislation and that the House of Delegates authorize the Executive Committee of the Florida Medical Association to lend reasonably sufficient financial support to accomplish this end.

It is obvious that many of us are uncertain as to the proper relationship of the physician and the hospital. It seems opportune, therefore, to quote certain well thought out principles governing these relationships which were adopted recently by the Medical Society of the District of Columbia:

"A. Community hospitals are civic enterprises, having a primary charitable motive, undertaken by philanthropic laymen who assume the financial obligation of providing place, equipment and personnel; and by philanthropic physicians who assume the obligation of providing medical care.

"Such hospital is a joint enterprise to render aid to ill, indigent persons; the lay supporters contributing time and money as such; the medical supporters contributing time and money in terms of professional service.

"B. In order to provide hospitalization for the non-indigent such hospitals customarily maintain accommodation for the care of full-pay patients, as well as for the care of partial-pay patients, who pay for this service according to their ability.

"C. In any of these types of hospitalization, however, the hospital as a corporation provides room, board, nursing and material, beyond which it has nothing to dispose of; at this point the medical staff enters into the equation as the essential element to make the service of a hospital whole and effective.

"D. The staff physicians' services are essential to the charitable purpose of the hospital and the acceptance of his appointment has a certain contract implication, viz., to perform gratuitously the professional service to make effective the hospitalization afforded gratuitously by the institution.

"A correlative implication of the contract should be that if the institution is recompensed for its service to the patient, the physician should be entitled to recompense also, and in the same proportion, for if the hospital owes it to the supporting public to make the load of charity as light as possible, it owes the same duty to its supporting staff. Otherwise the effect is that the lay supporters of the hospital (whether individual, community chest, or other), whose contributions of money are derived from incomes or activities not interrupted by personal service to the institution, are relieved of part of their burden; whereas the medical supporters bear the entire burden of their contribution, while the making of an income is completely stopped while making the contribution.

"E. This contribution to the hospital enterprise is not offset by any advantage offered by the hospital connection to the staff physician. His appointment is made upon his professional qualifications, which he has attained by his own efforts and before he is invited to serve the hospital. If it be said that the hospital lends prestige to the staff, it is much more true that the prestige of the hospital depends upon that of its staff; and this fact is an additional, if imponderable, contribution of the professional partner in the enterprise.

"F. Hospitals, being corporations, their management and consequently their policies of all sorts are the proper and necessary prerogatives of their Board of Directors. The organization of such boards commonly has overlooked the fact that there are two necessary factors to make the institution effective, and the medical staff has usually not been represented. This has occasioned two undesirable results: (1) The appearance of policies prejudicial to the medical profession, because the influence and information obtainable from medical members has not been available; and (2) the development of the idea that the staff members are servants of the institution rather than essential partners.

"G. It follows that the medical profession must insist upon proper representation on the boards of hospitals, and must so realize their status as partners, rather than servants, that the rights of the profession shall be protected by such representation.

"In view of the above stated principles and numerous others not quoted here, the following recommendations were adopted:

- "1. That no hospital shall be permitted to engage in any form of contract practice with any individual, or groups of individuals, for any purpose other than that of pure hospitalization.
- "2. That no hospital shall offer, for a price, any medical service.
- "3. That in no case may a hospital charge a patient for other than the use of its facilities and material. No medical fee may be charged and retained by the hospital.
- "4. That emergency and accident cases may have first aid only, administered at the hospital, and the physician selected by the patient must be immediately notified. In no case shall a patient, able to pay, be admitted to the service of a staff member without the request of the patient's own physician, if there be one.
- "5. That patients who are covered by compensation, health or accident insurance, cannot be considered as indigent.
- "6. That none but strictly indigent patients shall be admitted to dispensaries.
- "7. That no case, except in emergency, shall be admitted to a dispensary without a letter from a physician, local priest or pastor, welfare worker or other reputable citizen, to be followed by adequate investigation by the social worker of the hospital who shall be able to certify that the patient is known to be indigent.
- "8. That patients who have been discharged shall not later be readmitted to a dispensary, without certification that his present condition is the same as on his previous admission.
- "9. That as a condition upon which members of the Medical Society of the District of Columbia may continue to serve on the staff of a hospital or dispensary, the institution shall be approved annually with regard to its fair practices.

"It is apparent that a program such as the above can be made effective only through the united action of the local medical society. Unless the local profession is prepared to act almost as a unit it is inadvisable to start such a program.

"There is no doubt in the minds of those who have been observing the trend of events that it is necessary for the profession to take a strong stand if the practice of medicine is to remain under its control."

DRUGGIST COMPETITION

Counter prescribing by druggists is apparently increasing. Instead of limiting their practice to selling patent medicines asked for by the patient, they are in many instances making diagnoses(?) and compounding medicines from stock drugs in treatment or dispensing drugs in the manner of the physician's prescription entrusted to them.

FEDERAL COMPETITION

Federal Government hospitals for the care of veterans, it is of course generally admitted, are unfairly depriving physicians of incomes rightfully theirs. The doctors are taxed to support these institutions which admit patients who not only can have no moral, even if legitimate, claim for services and who can well afford to pay physicians in private practice for the necessary ser-

vices. Many instances could be cited of well-to-do people who benefit by this charity for major surgical and medical services.

The members of the Florida Medical Association have recently given some slight evidence of the birth of an interest in their economic welfare, or perhaps it is no exaggeration to state their economic existence. Several of the county societies have adopted the preliminary recommendations of this committee, while others have resolved to adopt and support plans of their own of greater or lesser scope. This is most commendable, for it shows that our pitiful economic plight is realized. It is encouraging and promises well for the future but the committee knows of no instance, in spite of several honest efforts by small groups within these larger groups, where much of real value has been accomplished.

IN CONCLUSION

Your Committee on Medical Economics has endeavored to bring to the attention of the membership a few of the many ways in which the medical profession of the State of Florida is being injured from an economic standpoint. It has endeavored to show that several of the gravest abuses are the result of the indifference and lack of loyalty of doctors to the welfare of themselves and their brother physicians, either individually or as groups such as component county societies and hospital staffs. It is convinced that loyalty to the profession by county societies, hospital staffs and individuals can and will rectify several of these abuses. There can be no doubt but that concerted action based on the welfare of the greatest number rather than selfish desire, jealousy and prejudice will entirely eliminate the encroachment by hospitals in the practice of medicine.

Your committee realizes how feeble have been its accomplishments as this report reflects. It realizes from its study how great is the need for increased and continued work along this line. It has endeavored to acquaint you with many generalities and some particularities, but "the surface has hardly been scratched." It is suggested that the Medical Economics Committee be made a permanent committee of this Association. The committee wishes to thank the officers of the Association, the several county societies, and the many individuals who have generously given their aid and advice. It appreciates the confi-

dence that has been evidenced on several occasions. It apologizes if it has seemed to usurp or delegate authority to itself on one or more occasions.

COMMITTEE ON MEDICAL ECONOMICS.

HERMAN WATSON, Chairman;
O. O. FEASTER, Secretary;
C. A. ANDREWS,
J. LEE KIRBY-SMITH,
N. L. SPENGLER.

Dr. Mary Freeman of Perrine urged that an opportunity be given to thoroughly consider this report before it be adopted as a whole.

Dr. Robert C. Woodard of Miami also opposed the adoption of the entire report at this time.

Upon motion duly seconded the report was approved for reference to the House of Delegates, as a temporary disposition.

The following proposed amendment to the constitution was presented by Dr. George M. Dawson of West Palm Beach:

"That the first sentence of Article 6, Sec. 2, be amended to read, 'The Association shall hold the annual meeting at a place selected by the outgoing executive committee.'"

President Rowlett stated that this amendment would have to be handled in accordance with Article XI of the Constitution and be acted upon at next year's meeting.

Motion to adjourn, seconded and carried.

FIRST SCIENTIFIC ASSEMBLY

The Scientific Assembly convened at 3:00 p. m., April 30th, on the roof garden of the Mayflower Hotel, with Dr. Herbert L. Bryans presiding.

The following paper was read and discussed:

"Treatment of Upper Urinary Tract Infections," Dr. E. Clay Shaw, Miami.

FIRST MEETING OF THE HOUSE OF DELEGATES

The House of Delegates convened at 5:00 p. m. Monday, April 30th, in the Assembly Hall of the Mayflower Hotel.

Call to order by the President, Dr. W. M. Rowlett.

The roll call by the Secretary showed the following delegates, alternates or substitutes present.

DELEGATES

ALACHUA COUNTY MEDICAL SOCIETY—
George C. Tillman

BAY COUNTY MEDICAL SOCIETY—
W. C. Roberts

BREVARD COUNTY MEDICAL SOCIETY—
W. J. Creel

BROWARD COUNTY MEDICAL SOCIETY—
E. M. Hendricks

COLUMBIA COUNTY MEDICAL SOCIETY—
T. H. Bates

DADE COUNTY MEDICAL SOCIETY—
Carl Dunaway
J. G. DuPuis
M. Jay Flipse
Roy Holmes
Walter C. Jones
Gerard Raap
Joseph Stewart
A. L. Walters
R. C. Woodard

DUVAL COUNTY MEDICAL SOCIETY—
H. R. Drew
Ralph Greene
W. E. Ross
Frederick J. Waas

ESCAMBIA COUNTY MEDICAL SOCIETY—
J. M. Hoffman

HILLSBORO COUNTY MEDICAL SOCIETY—
Bundy Allen
J. R. Boling
R. A. Ely
H. Mason Smith
J. W. Taylor

JACKSON COUNTY MEDICAL SOCIETY—
S. P. Vandiviere

LAKE COUNTY MEDICAL SOCIETY—
W. Lee Ashton

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON COUNTY
MEDICAL SOCIETY—
J. K. Johnston

MADISON COUNTY MEDICAL SOCIETY—
George O. Davis

MANATEE COUNTY MEDICAL SOCIETY—
T. M. McDuffee

MARION COUNTY MEDICAL SOCIETY—
R. E. Russell

ORANGE COUNTY MEDICAL SOCIETY—
C. D. Christ
H. A. Day
G. H. Edwards

PALM BEACH COUNTY MEDICAL SOCIETY—
George M. Dawson
F. K. Herpel

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY—
Leland H. Dame

PINELLAS COUNTY MEDICAL SOCIETY—
O. O. Feaster
J. A. Strickland
C. A. Williams
H. E. Winchester

POLK COUNTY MEDICAL SOCIETY—
J. R. Boulware, Jr.
H. K. Murphy

SARASOTA COUNTY MEDICAL SOCIETY—
C. B. Wilson

SEMINOLE COUNTY MEDICAL SOCIETY—
J. T. Denton

SUMTER COUNTY MEDICAL SOCIETY—
S. C. Wood

WALTON-OKALOOSA COUNTY MEDICAL SOCIETY—
J. C. McSween

DeSoto-Hardee-Highlands, Lee, Monroe, Putnam, St. Johns, St. Lucie-Okeechobee-Indian River-Martin, Taylor and Volusia County Medical Societies were not represented.

The first order of business was the adoption of the minutes of last year's meeting. A motion was offered by Dr. F. K. Herpel, seconded by Dr. George C. Tillman, that the minutes be adopted as published in the May, 1933, Journal. Voted and carried.

Dr. Rowlett then called for the nomination of delegates to the American Medical Association.

Dr. J. R. Graves of Miami was nominated by Dr. R. C. Woodard as delegate for a term of one year.

Dr. H. Mason Smith nominated Dr. Meredith Mallory, and Dr. F. J. Waas nominated Dr. Clifton Moor, as delegate for one year.

Standing vote was taken, resulting in a majority for Dr. Meredith Mallory.

Dr. Mallory was then declared elected as delegate for a one-year term.

Dr. Bundy Allen of Tampa was then nominated by Dr. E. M. Hendricks as delegate for a term of two years. Nomination seconded by Dr. H. Mason Smith.

Motion made and seconded that the nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Allen. So ordered.

Dr. Ralph Greene then nominated Dr. Clifton Moor of Tallahassee as alternate delegate for a term of two years.

It was moved and seconded that the nominations be closed and the Secretary instructed to cast the ballot for Dr. Moor. So ordered.

The next order of business was the selection of a meeting place for 1935.

Dr. R. E. Russell extended an invitation from the Marion County Medical Society to hold the convention next year in Ocala. He then asked that the privileges of the floor be extended to Dr. Eugene Peek, who further urged the acceptance of Ocala's invitation.

Dr. Joe Taylor then read a number of telegrams inviting the Association to come to Tampa in 1935.

Dr. C. D. Christ of Orlando seconded the Ocala invitation.

On a rising vote Ocala was unanimously selected.

The following resolution was read by Dr. Ralph Greene, of Jacksonville:

Whereas, the Florida State Hospital for insane was established at Chattahoochee, Gadsden County, Florida, in 1878, and

Whereas, said hospital has grown to be the largest hospital in the State of Florida, and

Whereas, the patient population of the Florida State Hospital is now approximately four thousand, and

It *hereas*, said unfortunate population is entitled to a highly developed therapeutic program, and

Whereas, the history of the institution up to date indicates that all past superintendents, including the present superintendent with three exceptions, have been laymen, and

Whereas, of all lay-superintendents who have presided over the great medical problems at the said hospital, have assumed charge without previous hospital training of any kind, and

Whereas, the policy of selecting lay-superintendents seems to be based upon the idea that a physician would not normally be expected to be possessed of the necessary administrative and business ability to fulfill the position of superintendent at the Florida State Hospital, and

Whereas, under the administration of the few doctors who have acted in the capacity of superintendent of said hospital, the real advances in institutional development have been made, and

Whereas, conspicuously, and in contrast, little if any true institutional progress has been made under the direction of the lay-superintendents, and

Whereas, experience thus far has indicated that lay-superintendents of the past and present have, of necessity, relied upon the advice of the medical personnel serving under them, and

Whereas, lay-superintendents throughout the history of the institutional operation, have been inclined to assume the attitude of final judgment, oftentimes contrary to medical advice given them, and

Whereas, such attitude on the part of lay-superintendents, unconsciously or otherwise, has the end effect of retarding the medical program, and

Whereas, it is a belief that there are competent medical men, with the necessary professional and administrative ability, available from the ranks of Florida doctors,

BE IT THEREFORE RESOLVED: That the Florida Medical Association memorialize the Board of Commissioners of State Institutions of Florida, said board being composed of the Governor of Florida and his cabinet officers, with the urgent recommendation that in the event of future vacancies in the superintendency of the Florida State Hospital said superintendent be selected from the medical profession of Florida, and from the membership of the Florida State Medical Association.

BE IT FURTHER RESOLVED: That the Florida Medical Association recommends to the Board of Commissioners of State Institutions that in the future any medical staff vacancies, junior or otherwise, be filled by selection of a properly trained physician who is a licensed practitioner of Florida.

BE IT FURTHER RESOLVED: That the Florida Medical Association recommends to the Board of Commissioners of State Institutions that the present woefully inadequate medical staff, insofar as their numerical strength is concerned, be increased to the ratio of doctors and patients as is recommended by the American Society of Psychiatrists.

BE IT FURTHER RESOLVED: By the Florida State Medical Association that the Florida State Hospital now having a patient population of approximately four thousand, with some buildings and equipment that are inadequate and obsolete; the location being in a remote rural district far removed from any important Florida urban center, and consequently deprived of the necessary fire and police protection, and constricted and hampered in securing services and supplies, and particularly an institution so located as to render it extremely expensive and inconvenient for the relatives of patients therein to visit them and because of its remote location almost completely deprived of a properly constituted visiting staff, and that the Florida Medical Association recommends to the Board of Commissioners of State Institutions and to the Legislature of Florida, that ways and means be provided for the establishment of a second state hospital more centrally located and as near as possible to some urban center of the state.

BE IT FURTHER RESOLVED: By the Florida Medical Association that the recommendations herein made are formulated with an idea in mind of bringing about a condition for the unfortunate insane of which they have for many years been deprived, and to which, as an enlightened community, they are justly entitled.

It was moved and seconded that the above resolution be adopted. Open discussion followed.

Dr. T. H. Bates then moved that all past presidents of the Association be accorded the privileges of the floor although not members of the House of Delegates. Voted and approved.

The discussion of Dr. Greene's resolution was continued by Drs. H. E. Palmer, H. Mason Smith and Dr. H. A. Day, after which the resolution was adopted by unanimous vote.

Dr. Shaler Richardson, Secretary, then read the following resolution from the report of the Executive Committee:

"Whereas the Aetna Life Insurance Company, of Hartford, Connecticut, has offered to issue its policies, at rates deemed satisfactory to the Executive Committee, to give liability insurance protection to members of this Association; and said Company has requested this Association to recommend said policies to its members; and

"Whereas, after full investigation, it has determined that this House of Delegates should comply with said request and recommend said policies to the membership;

"Now, THEREFORE, BE IT RESOLVED, That this House of Delegates does hereby recommend the policies of said Aetna Life Insurance Company to the membership of this Association as giving satisfactory insurance coverage, at prices deemed satisfactory;

"RESOLVED FURTHER, That this recommendation supersede all previous recommendations with reference to such insurance."

It was moved and seconded that the above resolution be adopted.

Replying to a question by Dr. Gerard Raap, Dr. Richardson stated that the policies with the U. S. F. & G. had not been cancelled, but with the passage of the resolution by the House of Delegates the Aetna policy will be the Association's recommendation.

The above resolution was adopted by rising vote.

Question by Dr. Edwards relative to the election of delegates to the A. M. A. On motion by Dr. Edwards this question was ordered held over until the next meeting of the House of Delegates.

Dr. M. J. Flipse of Miami presented the following resolution:

Whereas, legislation was enacted in 1927, calling for the creation of a tuberculosis commission and calling for an appropriation of \$200,000 for the construction and maintenance of a state sanatorium for the tuberculous; and

Whereas, the intent and purpose of this legislation has never been carried out in spite of the increasing death rate from this disease in Florida and the shortage of approximately 800 beds to meet the minimum requirements for hospitalization, and

Whereas, tuberculosis takes its greatest toll in persons between the ages of 15 and 45 when its victims are of the most value to their communities;

NOW, THEREFORE, BE IT RESOLVED, That the Florida Medical Association beseech those in authority to see that the provisions of this Act are carried out by arranging for the appointment of an active committee, the selection of a site and for the immediate construction of this institution.

BE IT FURTHER RESOLVED, That this resolution be spread upon the minutes of the Florida Medical Association and copies be sent to Honorable David Sholtz, Governor of Florida, Florida Tuberculosis and Health Association and other interested parties.

On motion, duly seconded, the above resolution was unanimously adopted.

Dr. Flipse then read his second resolution, as follows:

Whereas, tuberculosis and other diseases which are preventable and controllable are listed among the leading causes of death in Florida; and

Whereas, the education of the public in the prevention and control of tuberculosis and these other diseases is highly important from a medical and economical, as well as humanitarian, standpoint; and

Whereas, there are in Florida, voluntary health agencies organized for the purpose of educating the public in the prevention and control of these diseases and desiring to assist and supplement the efforts of the medical profession and official health agencies;

NOW, THEREFORE, BE IT RESOLVED, That a standing committee on tuberculosis and public health be appointed within the Florida Medical Association, for the purpose of interpreting the work of these agencies and assisting in planning their program so that they will be more efficient, effective and directing them along educational lines so they will not interfere with the practice of medicine and that members of this committee on tuberculosis and public health act as official advisors of these several organizations if so requested by these groups; and

BE IT FURTHER RESOLVED, That the president of this organization shall appoint such a committee of not less than five members, the appointments to be made from among those physicians known to be interested in and particularly dealing with tuberculosis and other diseases menacing the public health.

On motion made and duly seconded the above resolution was unanimously adopted.

The following letter from Governor Sholtz was read by Dr. Rowlett:

STATE OF FLORIDA
EXECUTIVE DEPARTMENT
TALLAHASSEE

April 26th, 1934.

Dr. William M. Rowlett, President,
Florida Medical Association,
Tampa, Florida.

MY DEAR DR. ROWLETT:

It would be a fine thing if the Florida Medical Association would make a real effort to bring to Florida the annual meeting of the American Medical Association, either in 1935 or 1936. I should like very much to co-operate and possibly can help somewhat in securing the necessary financing incident to such a convention.

Florida would have everything to gain by bringing the convention of the American Medical Association to this state, if we do nothing more than to acquaint the many leading physicians of the country with the health-giving qualities of Florida sunshine. The medical profession in Florida can be of incalculable benefit in sell-

ing our state to the other states in the union. Here is an opportunity for broad, unselfish service and I sincerely hope and trust that your Association, through its splendid leadership, may become interested in such a worthwhile endeavor.

I trust you will express to the members of your Association my good wishes and cordial greetings.

Very sincerely yours,

DAVID SHOLTZ,
Governor.

DS-g

It was moved, and seconded, that the incoming President appoint a committee of three to work toward obtaining the 1935 meeting of the American Medical Association. Motion adopted.

Dr. O. O. Feaster read the following resolution from the report of the Committee on Medical Economics:

"Whereas, there is evidence that some hospitals contract to furnish certain medical services and that they enter into certain phases of medical practice;

"THEREFORE, BE IT RESOLVED: (1) That the Florida Medical Association, by action of its House of Delegates, hereby instructs its Medical Education and Hospital Committee to withdraw or refuse approval to any Florida hospital which offers to furnish any phase of medical practice; (2) that the Florida Medical Association officially petition the American Medical Association and the American College of Surgeons to withdraw or refuse recognition to any and all hospitals offering such services; and (3) that the Florida Medical Association instruct its officers and its Legislative Committee to become active and energetic in having passed by the Legislature of the State of Florida such laws as shall specifically define as practice of medicine: anesthesia, x-ray diagnosis and x-ray therapy, and such other branches of the practice of medicine as are being abused by hospitals, and that the Florida Medical Association, as an organization, and its members, as individuals, lend their influence to secure the passage of such legislation and that the House of Delegates authorize the Executive Committee of the Florida Medical Association to lend reasonably sufficient financial support to accomplish this end."

It was moved and seconded that the above resolution be adopted.

Dr. R. C. Woodard of Miami opposed the adoption of Dr. Feaster's resolution.

After some discussion Dr. M. Jay Flipse moved that the resolution be amended by striking out the word "anesthesia" where it appears in this resolution. Seconded by Dr. F. J. Waas.

After much discussion Dr. Flipse's amendment was defeated and the House of Delegates voted to adopt the resolution as read by Dr. Feaster.

Dr. G. H. Edwards of Orlando offered the following proposed amendment to the By-Laws: That Chapter 5 of the By-Laws be amended to read, "All officers of the Florida Medical Association shall be elected by the House of Delegates." Seconded by Dr. F. K. Herpel. (Withdrawn to be read before General Session.)

Dr. Richardson then read the following proposed amendment to the Constitution, presented for final action:

That Article 4 of the Constitution be amended to read: "Sec. 6. Any member of the Florida Medical Association who has been an active member of the Association for 35 years shall be made a life member of the Association and exempt from all dues."

Motion by Dr. T. H. Bates that the above amendment be adopted, duly seconded and carried.

The following proposed changes in the By-Laws contained in the report of the Executive Committee to be presented at this meeting and acted upon at the meeting tomorrow—read by the Secretary, Dr. Richardson:

"The following shall be added to Chapter 3, sec. 3 of the By-Laws: 'Ample seating facilities shall be arranged for the House of Delegates, separate and apart from the seating facilities provided for visiting members of the Association.'

"The following new By-Laws shall be added to Chapter 3, as follows:

"Chapter 3, Sec. 16. Each delegate representing a component society, before being seated, shall deposit with the Association's secretary or his duly authorized representative, a certificate signed by the Secretary of his component society, stating that he has been regularly elected a delegate by that component society. All delegates shall report at the registration desk upon arrival at the state meeting, exhibit their credentials and receive instructions regarding the meeting place and time of House of Delegates.

"Chapter 3, Sec. 17. A delegate whose credentials have been accepted and whose name has been placed on the roll of the House shall remain a delegate of the body which he represents until final adjournment of the session and his place shall not be taken by any other delegate or alternate." (Sec. 17 not passed at second meeting House of Delegates.)

President Rowlett stated that these amendments would have to be acted upon at the next meeting of House of Delegates.

There being no further business to come before the meeting Dr. Rowlett declared the meeting adjourned.

SECOND SCIENTIFIC ASSEMBLY

The Scientific Assembly reconvened at 9:00 a. m., May 1st, with Dr. Herbert L. Bryans presiding.

The following papers were read and discussed: "Hypothyroidism Without Myxedema", Dr. Nathaniel L. Spengler, Tampa.

"Ophthalmology and Its Relation to General Medicine and Surgery", Dr. Nelson M. Black, Miami.

"Surgical Management of Thyrotoxicosis", Dr. John S. Helms, Jr., Tampa.

"Arthritis", (lantern slides), Dr. Julian E. Gammon, Jacksonville.

SECOND GENERAL SESSION

The General Assembly reconvened at 10:30 a. m. Tuesday, May 1st, on the roof garden with Dr. W. M. Rowlett, President, in the Chair.

The meeting was called to order, and the guest speaker, Dr. Howard A. Kelly of Baltimore, Md., was introduced by Dr. Rowlett:

"For years this Association has selected for honor guest at its annual meeting a man outstanding in the medical world. This year, when casting around in my mind for such a man, I selected one not only outstanding in the medical world, but outstanding as a teacher and as a writer. And I can say without fear of being contradicted that he is the most beloved man of the profession today,—beloved not only by the physicians and his patients but by the laity as well. And it gives me a great deal of pleasure to introduce to you now the Dean of the Medical Profession of America who will talk to you on the Readjustments in Surgery and Medicine—Dr. Howard A. Kelly."

An oral address was then delivered by Dr. Howard A. Kelly on "Readjustments in Surgery and Medicine."

THIRD SCIENTIFIC ASSEMBLY

Tuesday, May 1st, 2:00 p. m., Dr. Edward Jelks presiding.

The following papers were read, but due to a lack of time they were not open to general discussion.

"Treatment of Agranulocytosis with Yellow Bone Marrow", Dr. M. Jay Flipse, Miami.

"Fractures of the Elbow", Dr. Arthur H. Weiland, Coral Gables.

"A Perineorrhaphy", Dr. Gaston H. Edwards, Orlando.

"Surgical Treatment of Pulmonary Tuberculosis", Dr. Kenneth A. Morris, Jacksonville.

"Diagnosis and Surgical Management of Gastric and Duodenal Lesions", Drs. Bundy Allen and John R. Boling, Tampa.

"The Roentgenologist as a Consultant in Acute Abdominal Conditions", Dr. O. O. Feaster, St. Petersburg.

SECOND MEETING OF THE HOUSE OF DELEGATES

The second meeting of the House of Delegates convened at 5:00 p. m. Tuesday, May 1st, in the Assembly Hall of the Mayflower Hotel.

Roll call by the Secretary. The following delegates were present:

DELEGATES

ALACHUA COUNTY MEDICAL SOCIETY—
George C. Tillman

BAY COUNTY MEDICAL SOCIETY—
W. C. Roberts

BREVARD COUNTY MEDICAL SOCIETY—
W. J. Creel

BROWARD COUNTY MEDICAL SOCIETY—
E. M. Hendricks

COLUMBIA COUNTY MEDICAL SOCIETY—
T. H. Bates

DADE COUNTY MEDICAL SOCIETY—
J. G. DuPuis
M. Jay Flipse
Roy Holmes
Walter C. Jones
Gerard Raap
Joseph Stewart
A. L. Walters
R. C. Woodard

DESOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY—
W. H. Peacock

DUVAL COUNTY MEDICAL SOCIETY—
H. R. Drew
Ralph Greene
W. E. Ross
Frederick J. Waas

ESCAMBIA COUNTY MEDICAL SOCIETY—
J. M. Hoffman

HILLSBORO COUNTY MEDICAL SOCIETY—
Bundy Allen
H. Mason Smith
J. W. Taylor

JACKSON COUNTY MEDICAL SOCIETY—
S. P. Vandiviere

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON COUNTY MEDICAL SOCIETY—
Henry E. Palmer

MADISON COUNTY MEDICAL SOCIETY—
George O. Davis

MANATEE COUNTY MEDICAL SOCIETY—
T. M. McDuffee

ORANGE COUNTY MEDICAL SOCIETY—
C. D. Christ
H. A. Day
G. H. Edwards

PALM BEACH COUNTY MEDICAL SOCIETY—
George M. Dawson
F. K. Herpel

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY—
George A. Dame

PINELLAS COUNTY MEDICAL SOCIETY—

O. O. Feaster
J. A. Strickland
C. A. Williams
H. E. Winchester

ST. LUCIE-OKEECHOBEE-INDIAN RIVER-MARTIN COUNTY MEDICAL SOCIETY—

E. B. Hardee

SARASOTA COUNTY MEDICAL SOCIETY—

C. B. Wilson

SEMINOLE COUNTY MEDICAL SOCIETY—

J. T. Denton

SUMTER COUNTY MEDICAL SOCIETY—

S. C. Wood

VOLUSIA COUNTY MEDICAL SOCIETY—

J. Ralston Wells

WALTON-OKALOOSA COUNTY MEDICAL SOCIETY—

J. C. McSween

Lake, Lee, Marion, Monroe, Polk, Putnam, St. Johns, and Taylor County Medical Societies were not represented.

The first order of business was the election of one alternate delegate to the American Medical Association for a term of one year. Dr. Ralph Greene of Jacksonville nominated Dr. G. H. Edwards of Orlando.

Dr. Edwards requested that his name be withdrawn, but on motion by Dr. Greene the request was refused, the nominations ordered closed and Dr. Edwards declared elected.

The Secretary, Dr. Shaler Richardson, then read the following recommendation from the report of the Executive Committee:

"That Chapter 3, Section 3 of the By-Laws be amended by adding to it, as follows: 'Ample seating facilities shall be arranged for the House of Delegates, separate and apart from the seating facilities provided for visiting members of the Association.'

"That the following new By-Laws shall be added to Chapter 3, as follows: 'Chapter 3, Sec. 16. Each delegate representing a component society, before being seated, shall deposit with the Association's secretary or his duly authorized representative, a certificate signed by the secretary of his component society, stating that he has been regularly elected a delegate by that component society. All delegates shall report at the registration desk upon arrival at the state meeting, exhibit their credentials and receive instructions regarding the meeting place and time of the House of Delegates.

"Chapter 3, Sec. 17. A delegate whose credentials have been accepted and whose name has been placed on the roll of the House shall remain a delegate of the body which he represents until final adjournment of the session and his

place shall not be taken by any other delegate or alternate.' " (Sec. 17 not passed.)

It was moved and seconded that the above recommendations be accepted as read.

A substitute motion was offered by Dr. T. H. Bates, seconded by Dr. J. Ralston Wells that the above recommendations be voted upon separately.

Rising vote of the House on the substitute motion—18 for and 18 against.

Dr. Rowlett cast the deciding vote to accept the recommendations as read.

The decision was immediately debated. Discussions were made by Drs. Ross, Christ, Herpel, Feaster, and Flipse. Dr. Flipse moved to amend the last paragraph, while Dr. Ross moved that the last paragraph be stricken from the recommendations.

Dr. Rowlett announced that the recommendations had been accepted as a whole and that it was no longer open for discussion.

Dr. Palmer then offered the motion that said recommendations be reconsidered by the House. Duly seconded and carried, unanimously.

Dr. Palmer's motion was declared out of order, and the same motion was immediately offered by Dr. J. Ralston Wells, and unanimously adopted.

Dr. Flipse then offered a motion to amend the above recommendation, by striking out the word "not" from the last paragraph and substituting the word "may" and adding at the end of the sentence, "upon proper certification and endorsement of his credentials to his alternate."

Dr. Rowlett declared the motion of Dr. Flipse to be out of order and Dr. Flipse appealed from the decision of the Chair. Dr. Rowlett agreed to recant.

Dr. Edwards moved that the recommendations be reconsidered.

Dr. Flipse withdrew his motion in favor of Dr. Edwards' motion. Motion seconded.

Substitute motion offered that the recommendations be tabled. Motion lost.

It was then moved and seconded that the recommendations be voted on separately. Voted and carried.

The first recommendation was then read by Dr. Richardson, immediately voted and accepted.

The second recommendation was then read by Dr. Richardson and unanimously adopted.

The third recommendation read by Dr. Richardson.

Motion by Dr. Flipse to amend Chapter 3, sec. 17, by striking out the word "not", substituting the word "may" and adding at the end of the sentence these words, "upon proper certification and endorsement of his credentials to his alternate."

Seconded by Dr. Ross.

Substitute motion offered that this third recommendation be carried over until next year. Voted and carried.

It was moved and seconded and unanimously adopted by the House that Dr. Palmer of Tallahassee be seated as a regular delegate of this Association.

The following recommendation was then read from the report of the Executive Committee:

"We recommend the creation of an inter-relationship committee to work with similar committees from the Dental and Pharmaceutical Associations as outlined in the Presidential address."

Upon motion duly made, seconded and carried the above recommendation was adopted.

The following recommendation was also read from the report of the Executive Committee:

"We recommend that the House of Delegates authorize the incoming President to appoint a committee for the study and control of venereal diseases, feeble-mindedness and allied subjects as detailed in the President's address."

It was moved, seconded and carried that this committee be appointed.

The following resolution by Dr. Stewart of Dade County was read:

"BE IT RESOLVED: That the Florida Medical Association shall authorize its President to appoint a Committee to study contraception and therapeutic and eugenical sterilization and their practical application to:

- (a) The reduction of maternal and child mortality;
- (b) The reduction of abortions;
- (c) The correction of the present destructive trends in differential birth rates.

"The committee shall be empowered to make a report and recommendations suitable for the medical profession and public health and welfare agencies which report and recommendations shall first be submitted to the Executive Committee of the Florida Medical Association for approval."

On motion duly seconded and carried the above resolution was adopted.

Dr. G. H. Edwards offered a motion, seconded by Dr. H. A. Day, that the House of Delegates withdraw the recommendation to amend Chapter 5 of By-Laws that it may be presented in General Session. Voted and carried.

Dr. Shaler Richardson then read the name of Dr. Albert S. Munson of DeLand, proposed by

the Volusia County Society for Honorary Membership in the State Association.

It was moved by Dr. J. Ralston Wells, duly seconded, and carried that Dr. Munson be granted Honorary Membership.

The following resolution which was adopted during the meeting of the House of Delegates yesterday was again read by Dr. O. O. Feaster of the Committee on Medical Economics:

"Whereas, there is evidence that some hospitals contract to furnish certain medical services and that they enter into certain phases of medical practice;

"THEREFORE BE IT RESOLVED: (1) That the Florida Medical Association, by action of its House of Delegates, hereby instructs its Medical Education and Hospital Committee to withdraw or refuse approval to any Florida hospital which offers to furnish any phase of medical practice; (2) that the Florida Medical Association officially petition the American Medical Association and the American College of Surgeons to withdraw or refuse recognition to any and all hospitals offering such services; and (3) that the Florida Medical Association instruct its officers and its Legislative Committee to become active and energetic in having passed by the Legislature of the State of Florida such laws as shall specifically define as practice of medicine: anesthesia, x-ray diagnosis and x-ray therapy, and such other branches of the practice of medicine as are being abused by hospitals, and that the Florida Medical Association, as an organization, and its members, as individuals, lend their influence to secure the passage of such legislation and that the House of Delegates authorize the Executive Committee of the Florida Medical Association to lend reasonably sufficient financial support to accomplish this end."

Motion offered by Dr. Woodard of Miami that the House of Delegates reconsider its action on this resolution. Seconded and discussed at length by Drs. Waas, Woodard, Feaster, Ross, Hendricks, and DuPuis. Motion lost.

Dr. Bates stated that Dr. Henry Hanson had requested that privileges of the floor be granted to Mr. Walter Wilbur of the Federal Relief Organization.

Mr. Wilbur made a short talk on behalf of a certain group of unfortunates who are unable to obtain surgical aid, and asked that a committee be formed to cooperate with the F. E. R. A. in an effort to arrange for this care.

Dr. Rowlett announced that such a committee already existed.

Dr. Ralph Greene offered a reply to Mr. Wilbur on behalf of the medical profession of Florida.

Dr. H. A. Day of Orlando also gave a short talk, in which he expressed the hope that the status of the members of the medical profession might be preserved.

There being no further business, the meeting of the House of Delegates adjourned.

FOURTH SCIENTIFIC ASSEMBLY

Mayflower Hotel Roof Garden,
Wednesday, May 2, 9:00 A. M.

The following papers were read:

"Intestinal Obstruction", Dr. Joseph S. Stewart, Jr., Miami.

"Fibroid Tumors", Dr. Lloyd J. Netto, West Palm Beach.

"Tuberculin in the Treatment of Arteriosclerosis", (lantern slides), Dr. W. H. Spiers, Orlando.

"Recent Progress in Aviation Medicine", Lieut. Commander Louis Iverson, Pensacola.

"Clinical Nature of Malignancies and the Principles of Treatment", Dr. J. S. Turberville, Century.

"Suggestions as to the Care of Brain Injury Cases", Dr. Ralph Greene, Jacksonville.

"Action of Quinine on Malaria", Dr. Paul Eaton, Jacksonville.

THIRD GENERAL SESSION

The General Session of the Florida Medical Association convened again at 12:00 noon, May 2nd, on the roof garden of the Mayflower Hotel. Dr. W. M. Rowlett, President, took the Chair and immediately declared the meeting open for business.

There was no unfinished business to come before this session.

Dr. M. Jay Flipse of Miami, speaking on behalf of the visiting members, expressed their appreciation to the local society members for their most hearty and excellent entertainment during the convention. He also moved that the association as a whole give a rising vote of thanks to the Duval County Medical Society.

Rising vote of thanks.

In the order of new business Dr. G. H. Edwards of Orlando offered a motion that the component county societies instruct their delegates to approve the following amendment to the Constitution: That Article 7, section 3 be amended to read: "The officers of this Association shall be elected by the House of Delegates at their last session, and the names of new officers shall be announced to the Association at its last general session."

Dr. Richardson, Secretary of the Association, announced that this being a proposed change in

the constitution would have to lay over until next year, and it was accepted as such.

Dr. T. Z. Cason spoke briefly relative to the post-graduate courses to be held this summer.

An announcement was made by Dr. Richardson, Secretary of the Association, that S. P. K. Karrakis, representing the Holland-Rantos Company of 37-41 E. 18th St., New York City, had, without permission, shown a film in the Assembly Room on the Roof Garden and had distributed literature there just prior to this meeting and that he was, therefore, an intruder.

Dr. Rowlett: "I wish to thank you all, committeemen, officers, privates, all, for your untiring efforts and loyalty to the Association and its president during the past year. Unfortunately, there are not a sufficient number of appointments to give every man an official duty to perform during the year. The reason I say that is on account of the dozens of letters that I received from all over the state during my administration, pledging their support to the Association and asking what they could do to help it along. Therefore I wish that there was some way that we could utilize in an official manner every member of the Association. And I think that is my parting word, in a way of request, that you lend to the incoming President, Dr. Homer Pearson, that same loyalty and untiring effort that you have given the Association during the past year.

"Perhaps many of you do not know Dr. Pearson as I know him. But knowing him you cannot help admiring him and loving him, and if you do not love him that is concrete evidence that you do not know him. Perhaps he does not possess as much gusto as some of us, but remember that deep water always runs still, and at every meeting of importance during the past year I have found Homer there with pencil and pad, taking notes. I wonder if you all realize the great sacrifice that he has put to his practice in order to attend these meetings—and furthermore two years of it—a greater sacrifice he will make this coming year. You cannot keep from supporting him if you will take that into consideration.

"And now I am going to ask Drs. R. N. Burch and Joe Stewart to escort our President-elect, Dr. Homer L. Pearson, to the Chair."

Dr. Rowlett then relinquished the Chair to Dr. Pearson with the following message:

"Dr. Pearson, I hope that it will be as great a

pleasure to you as it is to me to work for the Florida Medical Association for the coming year, and I wish you God-speed."

Dr. Pearson: "I am sure that since you have heard no speeches during this convention that you will welcome greatly a speech from me. I assure you that it will be short and to the point.

"When I was elected to this office I realized that I had a job before me. I am well aware of the fact that this Association owes me nothing. I have done nothing up to this time that would demand recognition from you; therefore it must be to work that you elected me. So might it be. I have been sitting in at various committee meetings and attending these conventions for a number of years but I did not develop the paternal instinct until I realized the child was mine and now with the full realization that it is more or less my responsibility I enter upon my duties with fear and trembling.

"My greatest desire is to be a true representative of this Association and not try to forward my personal wishes. However, if I am to represent you it is necessary that you make your desires known.

"The committees for the coming year are hand-picked. Before their appointment each member was told of the responsibility he is assuming and each has promised to do all in his power for the Association during his term of service. I am expecting the support of every committee member in particular and of the Association in general.

"We are standing on the threshold of a new era. We hope for progress and prosperity and there are many changes that must take place within our profession as well as every profession. We are famous for our charitable attitude toward the individual and the community. It is difficult for us as well as the public to realize that charity service given is rarely appreciated and that charity is a community problem. The changes that must take place in our March of Progress must be directed by us as a profession. To do this we must retain a fair and open mind. We must deal with the conditions wisely and cheerfully as they arise. It may necessitate our unbending somewhat and cultivating a spirit of flexibility of mind and methods as applied to some of our present ideas and opinions.

"So, as we begin another year let me promise you the best that is in me, my time, my energy,

and let me ask of you your cooperation, your understanding and most of all your sympathy."

At the request of the President, Dr. L. M. Anderson of Lake City, presented the Past Presidents' Emblem to Dr. W. M. Rowlett.

Dr. Anderson: "It is a great pleasure to present this emblem to you, Dr. Rowlett, for your devotion to the medical profession of Florida ever since you became a member of it. You have shown this devotion in numerous ways, taking up time, going over the state and trying to clear up undesirable traffic. If it had not been for you and a few others like you we would have a great many more of these undesirables.

"I would like to remark further that since I have been a member of this Association for thirty-seven years we have tried to get a certain kind of law through the legislature, one that carries some protection to the patient but no protection to the doctor whatsoever, and at the end of thirty-seven years, with your help and others, it was passed by the legislature.

"It is true, Sir, that you have to call yourself an Allopathic Doctor. Your devotion to this Association is open knowledge, there is nothing further to say about it. Also, your devotion to your profession.

"This is a great honor to me to pin this on you—in a way a finished product of the Florida Medical Association. Now, when I pin this button on you, you are supposed to be a finished product—but you have just started. You have only laid the foundation and cemented it well."

Dr. Rowlett: "I thank you."

Dr. Pearson then announced that the next order of business was the election of a President-elect for the year 1934-35.

Dr. Herbert L. Bryans of Pensacola was nominated as President-elect by Dr. L. M. Anderson of Lake City, seconded by Dr. T. Z. Cason of Jacksonville and Dr. J. S. Turberville of Century.

It was moved and seconded that the nominations be closed, and the Secretary instructed to cast a unanimous ballot for Dr. Bryans. So ordered.

At the request of the President Drs. Cason and Turberville escorted Dr. Bryans to the rostrum.

Dr. Bryans: "Mr. President and Fellow Members: I am not going to give you a long talk.

Next year you are going to have to listen, so this year I will not impose upon you, but to express my appreciation for this high honor which is the highest that the Association can give. I want to assure you that I realize the responsibility of this high office. I am going to avail myself of the opportunity during the succeeding year to prepare myself so as to emulate the high services rendered by the past presidents of this Association. In closing I want to again thank you."

The Chair then called for nominations for First Vice-President and Dr. R. B. McIver of Jacksonville was nominated by Dr. L. M. Anderson of Lake City. Dr. N. A. Baltzell of Miami was also duly nominated. And Dr. Edward Jelks of Jacksonville was nominated by Dr. H. E. Palmer.

On motion duly made and seconded the nominations were closed, and a vote by ballot was taken.

At the request of Dr. Palmer, Dr. Jelks' name was withdrawn from the nominations and the President declared Dr. McIver First Vice-President for the coming year.

Dr. F. K. Herpel of West Palm Beach was nominated Second Vice-President by Dr. H. A. Barge of Miami. Dr. G. H. Edwards then nominated Dr. O. O. Feaster of St. Petersburg. Upon motion duly made and seconded the nominations were closed and ballot vote ordered.

Dr. Feaster received a majority of the votes cast.

Dr. Feaster was then declared Second Vice-President.

Upon motion duly made, seconded and carried Dr. Robert Ferguson of Ocala was nominated Third Vice-President, the nomination closed, and the Secretary instructed to cast a unanimous ballot for Dr. Ferguson.

Dr. M. Jay Flipse of Miami was nominated Secretary-Treasurer but immediately requested that his name be withdrawn.

Dr. L. M. Anderson of Lake City then nominated Dr. Shaler Richardson of Jacksonville, Secretary-Treasurer, and Editor of the Journal.

Upon motion of Dr. Flipse, duly seconded, the nominations were closed and the Secretary ordered to cast a ballot to succeed himself.

There being no further business to come before the meeting, on motion duly made and seconded, the meeting adjourned, *sine die*.

REGISTRATION

The total registration during the Sixty-first Annual Meeting of the Florida Medical Association, held in Jacksonville, April 30, May 1 and 2, was 617; members, 401; visitors, 52; exhibitors, 32; Woman's Auxiliary, 132.

OFFICERS

ROWLETT, WILLIAM M., President.....Tampa
PEARSON, HOMER, President-elect.....Miami
TILLMAN, G. C., First Vice-President.....Gainesville
WELLS, J. RALSTON, Second Vice-Pres....Daytona Beach
PEAVY, H. J., Third Vice-President.....Ft. Lauderdale
RICHARDSON, SHALER, Secretary-Treasurer...Jacksonville
THOMPSON, STEWART, Business Manager....Jacksonville

Alachua County Medical Society

Andrews, Edwin H.Gainesville
Colson, J. H.Gainesville
Dailey, I. A.Micanopy
Dell, J. MaxeyGainesville
Dell, J. Maxey, Jr.Gainesville
Hodges, J. H.Gainesville
Maines, John E., Jr.Gainesville
Smith, DeWitt T.Gainesville
Summerlin, J. L.Gainesville
Thomas, W. C.Gainesville
Whitaker, C. D.Raiford
Young, W. C.Chiefland

Bay County Medical Society

Fraser, Don S.Panama City
Perkins, HermanPanama City
Roberts, William C.Panama City

Brevard County Medical Society

Creel, W. J.Eau Gallie
Kenaston, T. C.Cocoa
Page, Walter C.Cocoa

Broward County Medical Society

Butler, Bruce F.Hollywood
Hendricks, E. M.Ft. Lauderdale
McClellan, G. S.Pompano
Robinson, Leigh F.Ft. Lauderdale

Columbia County Medical Society

Anderson, L. M.Lake City
Bates, T. H.Lake City
Harkness, R. B.Lake City
Nichols, William S.Lake City
Rose, JosephOlustee
Spearman, Mathew W.Lake City

Dade County Medical Society

Barge, H. A.Miami
Black, Nelson M.Miami
Burch, R. N.Miami
Cleghorn, C. D.Miami
Dunaway, C. E.Miami
DuPuis, J. G.Miami
Eskew, Don C.Miami
Flipse, M. JayMiami
Freeman, MaryPerrine
French, Elmo D.Miami
Gammage, Tom R.Miami
Gowdy, F. A.Miami
Gowdy, Ralph A.Miami Beach
Hall, John E.Miami
Hardie, Dan, Jr.Miami
Hodges, John W.Miami
Hodsdon, Benj. F.Miami
Holmes, Roy J.Miami
Jones, Walter C., Jr.Miami
Lefholz, RothwellMiami
Litterer, A. B.Miami
Lucinian, J. H.Miami
Lyll, Robert O.Miami
Milton, John D.Miami
Palmer, Bascom H.Miami
Panettiere, CayetanoMiami Beach
Payton, Frazier J.Miami Beach
Peters, EdgarMiami

Quillian, WarrenCoral Gables
Raap, GerardMiami
Repass, Robert E.Miami Beach
Sams, Wiley M.Miami
Shav, E. ClayMiami
Stewart, J. S.Miami
Tumlin, C. E.Miami
Vogt, F. A.Miami
Walker, H. A.Miami Beach
Walters, A. L.Miami Beach
Weiland, A. H.Coral Gables
Weinkle, BarneyMiami
Woodard, R. C.Miami

DeSoto-Hardee-Highlands County Medical Society

Bevis, Henry P.Arcadia
Martin, L. W.Sebring
Peacock, W. H.Wauchula
Weems, Howard V.Sebring

Duval County Medical Society

Adams, George E.Jacksonville
Adams, Thomas S.Jacksonville
Alford, NeilJacksonville
Bacon, HenryJacksonville
Baker, R. M.Jacksonville
Barfield, F. G.Jacksonville
Baumgartner, C. J.Jacksonville
Bayless, W. C.Jacksonville
Beckman, George E.Jacksonville
Black, J. B.Jacksonville
Blackmar, R. W.Jacksonville
Boone, James L.Jacksonville
Borland, J. L.Jacksonville
Brillhart, H. L.Jacksonville
Brink, F. A.Jacksonville
Brinson, P. A.Baldwin
Brinson, W. D.Baldwin
Broadbent, O. P.Jacksonville
Brown, Alan D.Jacksonville
Bryant, James M.Jacksonville
Buckman, Thomas E.Jacksonville
Carefoot, E. I.Jacksonville
Cason, T. Z.Jacksonville
Chapman, Benjamin A.Jacksonville
Chilli, Joseph L.Jacksonville
Collins, C. C.Jacksonville
Copeland, S. M.Jacksonville
Croft, George W.Jacksonville
Croft, Theo G.Jacksonville
Cunningham, L. W.Jacksonville
Day, GastonJacksonville
Dean, RussellJacksonville
Drew, H. R.Jacksonville
Driskell, S. E.Jacksonville
Dyrenforth, L. Y.Jacksonville
Eaton, PaulJacksonville
Enneis, F. B.Jacksonville
Erwin, StanleyJacksonville
Field, Thomas S.Jacksonville
Fort, F. L.Jacksonville
Gammon, Julian E.Jacksonville
Goodale, Banks H.Jacksonville
Gorman, J. M.Jacksonville
Greene, Ralph N.Jacksonville
Gurganious, A. P.Green Cove Springs
Hanson, HenryJacksonville
Harrell, D. E.Jacksonville
Harrell, O. E.Jacksonville
Harris, Herrman H.Jacksonville
Harris, W. G.Jacksonville
Hartman, J. H.Jacksonville
Hayes, J. W.Jacksonville
Henley, Charles F.Jacksonville
Henson, Graham E.Jacksonville
Holden, Gerry R.Jacksonville
Holloway, L. W.Jacksonville
Horne, H. F.Jacksonville
Hughes, V. A.Jacksonville
Ira, Gordon H.Jacksonville
Ives, H. A.Jacksonville
Jelks, EdwardJacksonville

Johnston, C. W.	Jacksonville
Keisling, F. C.	Jacksonville
Killinger, R. R.	Jacksonville
Kirby-Smith, J. L.	Jacksonville
Kirk, W. W.	Jacksonville
Knauer, W. J.	Jacksonville
Knight, A. Comer	Jacksonville
Krueger, F. W.	Jacksonville
Laffitte, L. Sydnor	Jacksonville
Limbaugh, L. M.	Jacksonville
McEuen, H. B.	Jacksonville
McGinnis, Robert H.	Jacksonville
McIver, Robert B.	Jacksonville
McKenzie, A. C.	Jacksonville
Mabry, C. B.	Jacksonville
Manhoff, Ben	Jacksonville
Manning, W. S.	Jacksonville
Martin, P. H.	Jacksonville
May, Robert D.	Jacksonville
Milam, E. B.	Jacksonville
Mitchell, G. M.	Jacksonville
Mitchell, J. H.	Jacksonville
Morris, Kenneth A.	Jacksonville
Morris, S. A.	Jacksonville
Norris, S. R.	Jacksonville
Norwood, J. K.	Jacksonville
Oberdorfer, Aaron Z.	Jacksonville
Oetjen, Frederick	Jacksonville
Owens, J. H.	Jacksonville
Pasco, J. D.	Jacksonville
Peterson, C. A.	Jacksonville
Peyton, Harry A.	Jacksonville
Porter, H. W.	Jacksonville
Proctor, H. L.	Jacksonville
Quasser, A. B.	Jacksonville
Ramage, Raymond B.	Jacksonville
Randolph, J. H.	Jacksonville
Richards, Ferdinand	Jacksonville
Richardson, George W.	Jacksonville
Rogers, W. W.	Jacksonville
Rollins, Clarence D.	Jacksonville
Ross, William E.	Jacksonville
Royce, Clayton E.	Jacksonville
Safer, Jacob V.	Jacksonville
Sanderson, Raymond	Jacksonville
Sandusky, C. M.	Jacksonville
Schnauss, William R.	Jacksonville
Schneider, David	Jacksonville
Sellers, E. T.	Jacksonville
Shaw, W. M.	Jacksonville
Simpson, J. Knox	Jacksonville
Stinson, W. M.	Jacksonville
Stollenwerck, A. D.	Jacksonville
Swift, Edwin C.	Jacksonville
Taylor, H. Marshall	Jacksonville
Teeter, E. H.	Jacksonville
Thomas, R. Y. H.	Jacksonville
Thompson, D. C.	Jacksonville
Thompson, T. C.	Jacksonville
Tyler, L. V.	Jacksonville
Upchurch, N. A.	Jacksonville
Van Schaick, H. D.	Jacksonville
Veal, E. W.	Jacksonville
Waas, F. J.	Jacksonville
Washburn, Clayton D.	Jacksonville
Wilcox, Clarence R.	Jacksonville
Wilkinson, Albert H.	Jacksonville
Wilson, A. K.	Jacksonville
Wilson, J. F.	Jacksonville
Woolsey, B. F.	Jacksonville
Wynn, Robert S.	Jacksonville

Escambia County Medical Society

Born, Charles C.	Pensacola
Brvans, H. L.	Pensacola
Fellows, J. H.	Pensacola
Hoffman, James M.	Pensacola
Lischkoff, M. A.	Pensacola
Nobles, R. G.	Pensacola
Payne, W. C.	Pensacola
Turberville, J. S.	Century

Hillsboro County Medical Society

Allen, Bundy	Tampa
Andrews, C. A.	Tampa
Beyer, A. R.	Tampa
Bidwell, A. M.	Tampa
Blackmon, H. J.	Tampa
Blake, W. C.	Tampa
Boling, John R.	Tampa
Bottari, G. C.	Tampa
Brown, H. O.	Tampa
Carlton, Leland F.	Tampa
Cook, George L.	Tampa
Costa, Frank J.	Tampa
Dickinson, J. C.	Tampa
Duke, R. R.	Tampa
Duncan, William P.	Tampa
Ely, R. A.	Tampa
Estes, J. L.	Tampa
Fluker, C. B.	Tampa
Garcia, Parsons M.	West Tampa
Gilmer, Eugene S.	Tampa
Guerra, J. J.	Tampa
Gyland, Stephen P.	Tampa
Halton, Jack	Tampa
Hardy, G. E. W.	Tampa
Helms, John S., Jr.	Tampa
Henderson, Robert P.	Tampa
Higgins, Allen F.	Tampa
Lancaster, William J.	Tampa
Lowry, Blackburn W.	Tampa
McEachern, J. R.	Tampa
Metzger, Frank C.	Tampa
Pate, Julien C.	Tampa
Pease, Charles W.	Tampa
Saxton, J. J.	Tampa
Smith, H. Mason	Tampa
Spengler, Nathaniel L.	Tampa
Taylor, Joseph W.	Tampa
Torbett, R. S.	Tampa
Vinson, J. C.	Tampa

Jackson County Medical Society

Baltzell, N. A.	Marianna
McKinnon, Daniel A.	Marianna
Miller, R. L.	Graceville
Vandiviere, S. P.	Marianna

Lake County Medical Society

Ashton, W. Lee	Umatilla
Fenn, Harry T.	Mt. Dora
Tyre, C. McK.	Eustis
Williams, Rabun H.	Eustis

Lee County Medical Society

Jones, H. Quillian	Ft. Myers
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Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society

Davis, J. C.	Quincy
Dozier, L. L.	Tallahassee
Gardner, O. W.	Greensboro
Johnston, J. K.	Tallahassee
McClure, Herbert A.	Tallahassee
Massey, William W.	Quincy
Mols, Edith P.	Tallahassee
Moor, F. Clifton	Tallahassee
Palmer, Henry E.	Tallahassee
Pound, J. H.	Chattahoochee
Salley, S. Marion	Tallahassee
Wilensky, M. C.	Chattahoochee
Wilhoit, Sterling E.	Quincy
Williams, John L.	Tallahassee

Madison County Medical Society

Davis, George O.	Madison
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Manatee County Medical Society

Blake, Lowrie W.	Bradenton
English, A. Q.	Palmetto
Gates, Hubbard	Bradenton
Harrison, M. M.	Bradenton
McDuffee, Toliver M.	Manatee
Sugg, William D.	Bradenton

Marion County Medical Society

Brown, Andrew G.	Dunnellon
Chalker, James L.	Ocala
Cumming, Richard C.	Ocala
Ferguson, R. D.	Ocala
Lindner, E. G.	Ocala
Mathews, A. L.	Bronson
Moore, J. N.	Ocala
Peek, Eugene G.	Ocala
Russell, Ralph E.	Ocala
Watt, Harry F.	Ocala

Orange County Medical Society

Brinson, Haynes	Kissimmee
Burks, B. A.	Winter Park
Christ, C. D.	Orlando
Collins, Charles J.	Orlando
Day, Horace A.	Orlando
Edwards, Gaston H.	Orlando
Geiger, Hugh S.	Kissimmee
Gray, Frank D.	Orlando
Hart, Ruth S.	Winter Park
Ingram, L. C.	Orlando
Johnston, Hewitt	Orlando
Lawson, Ben H.	Winter Garden
Lynn, C. W.	Orlando
McBride, Thomas E.	Apopka
McEwan, Duncan T.	Orlando
Mallory, Meredith	Orlando
Osincup, Gilbert S.	Orlando
Page, W. Grady	Orlando
Pines, John A.	Orlando
Redding, John L.	Orlando
Rivers, Thomas M.	Kissimmee
Shoemaker, Samuel A.	Orlando
Spiers, William H.	Orlando
Sutter, Lerov M.	Orlando
Taylor, B. E.	Orlando
Weed, Walter A.	Orlando

Palm Beach County Medical Society

Arnold, Wilbur O.	W. Palm Beach
Baldwin, R. Henry	W. Palm Beach
Buck, William J.	Belle Glade
Dawson, George M.	W. Palm Beach
Gardner, William H.	W. Palm Beach
Herpel, Frederick K.	W. Palm Beach
Johnson, Vesey M.	W. Palm Beach
Netto, Lloyd J.	W. Palm Beach
Nowling, James C.	W. Palm Beach
Papot, Grace E.	W. Palm Beach
Pittman, J. H.	W. Palm Beach
Rozier, L. M.	W. Palm Beach
Savød, William Y.	W. Palm Beach
Shackelford, C. W.	W. Palm Beach
Shackelford, W. L.	W. Palm Beach
Van Landingham, W. E.	W. Palm Beach

Pasco-Hernando-Citrus County Medical Society

Anderson, Claude	Dade City
Creekmore, George R.	Brooksville
Dame, George A.	Inverness
Dame, Leland H.	Inverness
Moon, William B.	Crystal River

Pinellas County Medical Society

Anderson, Arnold S.	St. Petersburg
Davis, W. M.	St. Petersburg
Dickerson, Lucien B.	Clearwater
Feaster, O. O.	St. Petersburg
Knowlton, R. H.	St. Petersburg
Marr, Norval M.	St. Petersburg
Mease, John A., Jr.	Dunedin
Mills, A. L.	St. Petersburg
Nickle, M. A.	Clearwater
Stevens, Ralph E.	St. Petersburg
Srickland, I. A.	St. Petersburg
Whitford, Grace R.	Ozona
Williams, C. A.	St. Petersburg
Winchester, H. E.	Dunedin
Wood, Alvin J.	St. Petersburg

Polk County Medical Society

Boulware, James	Lakeland
Cline, R. L.	Lakeland

Murphy, H. K.	Mulberry
Overstreet, George C.	Lakeland
Vaughn, John W.	Lakeland
Watson, Herman	Lakeland

Putnam County Medical Society

Drexel, A. E.	Palatka
Rosborough, D. Y.	Palatka

St. Johns County Medical Society

Britt, Reddin	St. Augustine
Chappell, F. V.	Hastings
Fletcher, E. Gordon	St. Augustine
Grace, Charles C.	St. Augustine
Potter, George W.	St. Augustine
Walkup, A. Clark	St. Augustine
White, Herbert E.	St. Augustine

St. Lucie-Okeechobee-Indian River-Martin County Medical Society

Clark, H. D.	Ft. Pierce
Claxton, W. A.	Jacksonville
Davis, Claude L.	Okeechobee
Hardee, E. B.	Vero Beach
Whiddon, L. L.	Ft. Pierce

Sarasota County Medical Society

Halton, Joseph	Sarasota
Harris, J. E.	Sarasota
Kennedy, David R.	Sarasota
Morton, A. O.	Sarasota
Wilson, Cullen B.	Sarasota

Seminole County Medical Society

Denton, J. T.	Sanford
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Sumter County Medical Society

Wood, S. C.	Leesburg
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Taylor County Medical Society

Greene, Ralph J.	Perry
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Volusia County Medical Society

Brown, L. V. L.	DeLand
Chandler, J. R.	Daytona Beach
Chowning, W. C.	New Smyrna
Davis, C. W.	Daytona Beach
Dillard, T. H.	DeLand
Green, George M.	Daytona Beach
Pay, W. C.	DeLand
Rutter, Joseph H.	Daytona Beach
Taylor, Joseph E.	DeLand
West, Hugh	DeLand

Walton-Okaloosa County Medical Society

McDonald, C. W.	DeFuniak Springs
McSween, J. C.	DeFuniak Springs

Guest of Honor

Kelly, Howard A.	Baltimore, Md.
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Visitors

Avera, J. B.	Brunswick, Ga.
Beasley, B. T.	Atlanta, Ga.
Biggs, E. L.	Starke
Branan, J. H.	Pensacola
Brantley, Z.	Grandin
Bunker, L. L.	Fernandina
Calvert, Read N.	Orlando
Casparis, Horton	Nashville, Tenn.
Cobb, A. T.	Chattahoochee
Cook, H. M.	Tampa
Counts, H. W.	Jacksonville
Cox, J. W.	Alexandria, Va.
Crossley, E. R.	Chicago, Ill.
Daves, F. E.	Chattahoochee
Ellis, John T.	Dothan, Ala.
Fernandez, F. M.	Jacksonville
Fort, E. W.	Crescent City
Fort, A. G.	Atlanta
Goldberg, Harry	Louisville, Ky.
Griffin, A.	Valdosta, Ga.
Griffitts, T. H. D.	Jacksonville
Harwell, D. F.	Jacksonville
Howell, Harry S.	Chattahoochee
Hughes, A. P.	Pittsburgh, Pa.
Iverson, Louis	Pensacola
Kappler, George J.	West Palm Beach
Kindred, I. I.	DeLand

Lancaster, E. M. Shady Dale, Ga.
 Landon, A. H. Jacksonville
 Lipscomb, Thomas H. Jacksonville
 Loran, C. P. Birmingham, Ala.
 Love, W. J. Opelika, Ala.
 Lyster, J. G. Richmond, Va.
 McFatter, T. K. Dothan, Ala.
 Maines, John E. Lake Butler
 O'Hara, A. M. Sneads
 Oppenheimer, Russell H. Atlanta, Ga.
 Osterling, H. E. Winter Park
 Perry, P. C. Jacksonville
 Pitman, J. F. Lake City
 Reaves, Hugh G. Knoxville, Tenn.
 Roberts, Earl H. Jacksonville Beach
 Roberts, Joe Lake City
 Scott, A. L. Montgomery, Ala.
 Slocum, Robert B. Wilmington, N. C.
 Smith, J. M. Valdosta, Ga.
 Strickland, Henry M. Live Oak
 Turner, R. J. Shamrock
 Wall, C. K. Thomasville, Ga.
 Weeks, L. R. Trenton
 Whitlock, W. E. High Springs
 Williams, W. J. Seville
 Willis, T. V. Brunswick, Ga.
 Zeagler, G. M. Palatka

Exhibitors

Anderson, T. Emmett. Tampa
 Arrington, Frank Jacksonville
 Avery, W. E. Lynchburg, Va.
 Ball, H. L. Pensacola
 Black, L. H. Jacksonville
 Everhart, Laurence Atlanta, Ga.
 Everhart, Mrs. Laurence Atlanta, Ga.
 Fassett, L. W. Miami
 Harris, Mace A. Jacksonville
 Hartt, L. Milwaukee, Wis.
 Heether, H. B. Jacksonville
 Hightower, S. W. Jacksonville
 Jean, O. H. Eau Gallie
 Jensen, A. Atlanta
 Jones, George I. Louisville, Ky.
 Jones, Mrs. George I. Louisville, Ky.
 Karrakis, S. Paul. New York
 Mackel, S. C. Atlanta, Ga.
 Merrihew, J. L. Miami
 Mills, C. F. Tampa
 Nicholson, H. B. Atlanta, Ga.
 Oberst, George St. Louis, Mo.
 Palmer, Ed Jacksonville
 Parramore, Henry Jacksonville
 Peters, Don A. Jacksonville
 Seals, J. H. Jacksonville
 Spitz, Harold Atlanta, Ga.
 Thomas, R. H. Jacksonville
 Thompson, Byron Jacksonville
 Thompson, Ray Jacksonville
 Weaver, M. H. Jacksonville
 Wilson, J. T. Jacksonville

WOMAN'S AUXILIARY

MEMBERS AND GUESTS REGISTERED AT THE
 JACKSONVILLE MEETING

Mrs. Edward H. Andrews. Gainesville
 Mrs. Neil Alford Jacksonville
 Mrs. Arnold S. Anderson. St. Petersburg
 Mrs. C. A. Andrews. Tampa
 Mrs. L. V. L. Brown. DeLand
 Mrs. F. A. Brink Jacksonville
 Mrs. O. P. Broadbent Jacksonville
 Mrs. I. R. Boling Tampa
 Mrs. N. A. Baltzell Marianna
 Mrs. Z. Brantley Grandin
 Mrs. J. E. Boyd Jacksonville
 Mrs. George E. Beckman. Jacksonville
 Mrs. L. W. Blake Bradenton
 Mrs. Haynes Brinson. Kissimmee
 Mrs. C. W. Bache Cocoa

Mrs. Thomas E. Buckman. Jacksonville
 Mrs. B. A. Chapman. Jacksonville
 Mrs. C. D. Christ. Orlando
 Mrs. Theodore G. Croft. Jacksonville
 Mrs. E. R. Crossley. Chicago, Ill.
 Mrs. W. C. Chowning. New Smyrna
 Miss Virginia Chowning. New Smyrna
 Mrs. S. M. Copeland. Jacksonville
 Mrs. G. R. Creekmore. Brooksville
 Mrs. Charles J. Collins. Orlando
 Mrs. C. C. Collins. Jacksonville
 Mrs. J. C. Critchfield. Princeton, Ind.
 Mrs. S. E. Driskell Jacksonville
 Mrs. George M. Dawson. West Palm Beach
 Mrs. Gaston Day Jacksonville
 Mrs. F. B. Enneis Jacksonville
 Mrs. Don F. Fraser. Panama City
 Mrs. R. D. Ferguson. Ocala
 Mrs. F. L. Fort. Jacksonville
 Mrs. H. Gates Bradenton
 Mrs. B. H. Goodale. Jacksonville
 Mrs. Ralph N. Greene. Jacksonville
 Mrs. T. H. D. Griffiths. Jacksonville
 Mrs. Julian Gammon Jacksonville
 Mrs. H. S. Geiger Kissimmee
 Mrs. W. G. Harris. Jacksonville
 Mrs. D. E. Harrell Jacksonville
 Mrs. Herrman H. Harris. Jacksonville
 Mrs. Helen Sutton Harris. Ocala
 Mrs. W. H. Hanson. Jacksonville
 Mrs. Luther Holloway. Jacksonville
 Mrs. Susanne Houston. Jacksonville
 Mrs. G. R. Holden. Jacksonville
 Miss Katharine Holden. Jacksonville
 Mrs. Wyman Harden St. Petersburg
 Mrs. Gordon H. Ira. Jacksonville
 Mrs. Walter C. Jones. Miami
 Mrs. Edward Jelks. Jacksonville
 Mrs. F. C. Kenaston. Cocoa
 Mrs. F. W. Krueger. Jacksonville
 Mrs. R. R. Killinger. Jacksonville
 Mrs. J. J. Kindred. DeLand
 Mrs. F. C. Keisling. Jacksonville
 Mrs. Robert O. Lyell Miami
 Mrs. Wilburn Lassiter Gainesville
 Mrs. E. G. Lindner Ocala
 Mrs. L. S. Laffitte Jacksonville
 Mrs. John E. Maines, Jr. Gainesville
 Mrs. George M. Mitchell. Jacksonville
 Mrs. John H. Mitchell. Jacksonville
 Mrs. Lester MacDonald. Jacksonville
 Mrs. Alvin Mills. St. Petersburg
 Mrs. T. M. McDuffee. Manatee
 Mrs. F. Clifton Moor. Tallahassee
 Mrs. Robert B. McIver. Jacksonville
 Mrs. W. W. Massey. Quincy
 Mrs. D. Mackay Baltimore, Md.
 Mrs. N. C. McKenna. New York City
 Mrs. Kenneth A. Morris. Jacksonville
 Mrs. F. C. Metzger. Tampa
 Mrs. E. R. McMurray. Bartow
 Mrs. E. B. Milam. Jacksonville
 Mrs. J. E. Maines. Lake Butler
 Mrs. Robert D. May. Jacksonville
 Mrs. George S. McClellan. Pompano
 Mrs. R. L. Miller. Graceville
 Mrs. J. C. Nowling. West Palm Beach
 Mrs. S. R. Norris. Jacksonville
 Mrs. J. H. Owens. Jacksonville
 Mrs. George C. Overstreet. Lakeland
 Mrs. G. W. Potter. St. Augustine
 Mrs. W. C. Page Cocoa
 Mrs. James D. Pasco. Jacksonville
 Mrs. W. H. Peacock. Wauchula
 Mrs. Henry E. Palmer. Tallahassee
 Mrs. E. G. Peek. Ocala
 Mrs. Homer Pearson. Miami
 Mrs. Harry A. Peyton. Jacksonville
 Mrs. A. B. Quasser. Jacksonville
 Mrs. W. E. Ross. Jacksonville

Mrs. George W. Richardson.....Jacksonville
 Mrs. W. C. Roberts.....Panama City
 Mrs. R. E. Russell.....Ocala
 Mrs. Clarence D. Rollins.....Jacksonville
 Mrs. Shaler Richardson.....Jacksonville
 Mrs. S. J. Stubbs.....Douglas, Ga.
 Mrs. W. Y. Sayad.....Palm Beach
 Mrs. S. Marion Salley.....Tallahassee
 Mrs. D. T. Smith.....Gainesville
 Mrs. E. C. Swift.....Orange Park
 Mrs. W. H. Spiers.....Orlando
 Mrs. C. M. Sandusky.....Jacksonville
 Mrs. W. L. Shackelford.....West Palm Beach
 Mrs. J. L. Kirby-Smith.....Jacksonville
 Mrs. J. Knox Simpson.....Jacksonville
 Mrs. J. E. Taylor.....DeLand
 Mrs. L. V. Tyler.....Jacksonville
 Mrs. R. J. Turner.....Shamrock
 Mrs. George C. Tillman.....Gainesville
 Mrs. S. G. Thompson.....Jacksonville
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GREETINGS FROM A PAST PRESIDENT

FREDERICK J. WALTER, M.D.
 1008 BANK OF AMERICA BUILDING
 SAN DIEGO, CALIFORNIA

April 27, 1934.

Shaler Richardson, M.D.,
 Jacksonville, Florida.

DEAR DOCTOR RICHARDSON:

The annual meeting of the Florida Medical Association is always an event to a past president. Though the continent may divide us you may rest assured that my heart is with you and Dr. Rowlett, at this time. It was during the World War when first Warren of Palatka, and then Walter of Daytona were at the helm, followed by Ross of Jacksonville. And now we mourn the memory of Jackson, of Miami, Helms of Tampa and Seagears of St. Augustine, along with Drs. Porter, of Key West, and Love of Jacksonville, all of which we owe debts of gratitude in shaping our course to make the Association what it is today.

My sincere good wishes go with this to Dr. Rowlett, and yourself for a most profitable session in Jacksonville this week. And here I send Greetings to the entire membership now in session.

With many fond memories, I am,

FRED J. WALTER.



DR. L. M. ANDERSON

A change in the Constitution of the Florida Medical Association acted upon by the House of Delegates during the Jacksonville meeting makes provision for Life Members to the Association. To qualify as a Life Member, it is necessary to have held continuous membership in the Association for thirty-five years.

Dr. L. M. Anderson of Lake City was the first to qualify as a Life Member of the Association. Dr. Anderson is a past president of the Association and has held continuous membership since 1897. He is a native of Missouri and came to Florida on October 10, 1884. He is a graduate of the old Atlanta Medical College, now Emory University School of Medicine, and, as president of the Emory Medical Alumni in Florida, he is said to be the oldest medical alumnus of the University in this state.

Dr. Anderson first practiced medicine in Jasper, Florida, but has been in Lake City for the past 27 years. He has held many responsible offices in the Florida Medical Association having served as chairman of the Executive Committee, chairman of the Scientific Program Committee, councilor for the third district, and on the Committee on Legislation and Public Policy. In all of these capacities he has served faithfully and at all times has been an enthusiast in the building up of ethical organized medicine.

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HOMER LEE PEARSON, OUR PRESIDENT

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The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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genuine gaiety of spirit, he is a prince of good company, a genial and entertaining companion with a great sense of humor and a personality which has endeared him to the hearts of his colleagues. Yet, his convictions are firm and his sense of obligation to his patients and to his profession is boundless.

There are a few of us who have seen Homer Pearson when "smoke got in his eyes." We found deep down beneath the surface a still deeper sense of religious conviction and a seriousness which is rarely understood.

His most outstanding characteristics, perhaps, are his capacity for work and his intense interest in organized medicine. It is these qualifications which have made him a leader in his community, for

"It is a good thing to remember,

But a better thing to do

He always works with the construction gang

And not with the wrecking crew."

OUR PRESIDENT

Homer Lee Pearson was born in Ware County, Georgia, April 12, 1898, within sight of the dark and dismal horizon which marks one of the seven wonders of America, the great Okefinokee Swamp. His early preparatory work was obtained at Sparks College and at Oxford, Georgia. Graduating from the Emory University School of Medicine in 1921, he completed a course in Public Health work at Augusta, Georgia, and afterward became engaged in this work as Commissioner of Public Health in Thomas County, Georgia. Realizing that Public Health work was not his metier, he entered Piedmont Hospital in Atlanta, Georgia, where he completed his internship and was afterward engaged in general practice at Clifton, South Carolina, for one year. He then completed a term of post-graduate work at the New York Lying-in and Post-Graduate Hospitals and came to Miami in August, 1924. He is a Mason, a Shriner, and a member of the Phi Beta Pi medical fraternity.

To estimate Homer Pearson from his published literary contributions or from any outstanding professional abilities would be unfair and unjust. His impress on his profession can be properly evaluated only by those who have enjoyed his care and skill, and by those of his colleagues who have felt the influence of his personality. It is doubtful if any medical man has attained the high position in his profession with which he has been honored, without a greater number of enemies. Homer Pearson possesses a

THE JACKSONVILLE MEETING

The Duval County Medical Society, acting as host for the Sixty-First Annual Meeting of the Florida Medical Association held in Jacksonville, April 30, May 1 and 2, is to be congratulated. The attendance at this meeting broke all previous records, both as to the number of members in attendance and guests present.

Jacksonville as a convention city has the advantage of being the largest in population and centrally located. The management of the Mayflower Hotel was most cordial and looked after the convenience of guests to the best of its ability which made a real contribution to the success of the meeting. There is, however, no hotel in the city of Jacksonville adequate to handle a convention of this size under one roof. Seventeen spaces for technical exhibits were sold in the main lobby and two scientific exhibits were placed in the rear of the roof garden. Considerable more revenue could have been obtained for the entertaining society had there been more space available for technical exhibits. Quite a number of worth-while firms who made application for exhibit space had to be turned down.

The Association dinner, held on the roof garden of the Mayflower Hotel, was well attended. The menu was well selected; the service and food of the highest order. The large roof garden dining room was almost filled to its capacity. Three hundred and ninety-three were served during the dinner. There was an excellent program

and those attending enjoyed several hours of dancing following the dinner.

The golf tournament was quite a success and the forming of a golf association within our membership was an indication of the interest taken in golf by the doctors attending the meeting. A more complete outline of the golf activities, tournament, prizes, etc., will be found just preceding the news items.

The smoker at the Florida Yacht Club furnished some unusual features of entertainment and was well attended.

The wives of doctors and lady guests were continuously entertained by the Woman's Auxiliary of the Duval County Medical Society during the convention. Many unusual forms of entertainment were provided for the lady guests and from the echoes sounded they were well pleased with their visit in Jacksonville.

Complete proceedings of the meeting, as well as the names of new officers and committee appointments, appear in this Journal.

GRADUATE SHORT COURSE FOR DOCTORS OF MEDICINE IN FLORIDA JUNE 25-30, 1934

GENERAL INFORMATION

The Graduate Course for Doctors of Medicine in Florida will be held at the University of Florida June 25-30. This course is conducted by the General Extension Division of the University and is sponsored by the Florida Medical Association. The program of instruction has been planned by a committee of doctors appointed by the President of the Florida Medical Association. The purpose of the course is to give the doctors of Florida an opportunity to keep up with the latest discoveries in the field of medical science through direct contact with leading specialists of the country.

REGISTRATION

The registration fee for the course is \$5.00. In order that adequate plans and preparations may be made to accommodate those who attend the course, the committee requests that each doctor send in his registration as far in advance as possible. It is further requested that the fee of \$5.00 accompany each registration.

OTHER EXPENSE

The only expense other than the registration fee will be for transportation to and from Gainesville and board and room while at the University. Special rates will be made by the Gainesville

hotels. Those who wish may secure rooms near the University campus for \$1.00 per day. The University Cafeteria will serve meals for 80c per day.

INFORMATION DESK

The information desk will be located in the lobby of the new P. K. Yonge Laboratory School. Immediately upon arrival in Gainesville, doctors are requested to report to the information desk where they will receive instructions for the week. All assemblies will be held in the auditorium of the P. K. Yonge School. Laboratories will be set up in rooms adjacent to the auditorium.

MODEL LABORATORY AND EXHIBITS

The State Board of Health will set up a model laboratory such as would be required by doctors carrying on a general practice. There will be a skilled technician in charge of the laboratory throughout the course. There will also be exhibits by the Florida Dermatological Association and the Florida Roentgenological Association.

FACULTY AND LECTURERS

Dr. Wayne Babcock, Philadelphia, Pa., Professor of Surgery, Temple University.

Dr. Horton Casparis, Nashville, Tenn., Professor of Pediatrics, Vanderbilt University.

Dr. Chevalier Jackson, Philadelphia, Pa., Professor of Bronchoscopy and Esophagoscopy, Temple University.

Dr. Edward L. King, New Orleans, La., Professor of Obstetrics, Tulane University.

Dr. John A. Kolmer, Philadelphia, Pa., Professor of Medicine, Temple University.

Dr. O. C. Wenger, Hot Springs, Ark., Medical Officer in Charge, Hot Springs National Park.

PROGRAM

Monday, June 25

- 10:00-11:00—"Pediatrics", Dr. Casparis.
- 11:00-12:00—"Obstetrics", Dr. King.
- 12:00- 1:00—"Venereal Diseases", Dr. Wenger.
- 1:00- 2:30—Lunch—Speaker, Dr. Casparis.
- 2:30- 3:30—"Pediatrics", Dr. Casparis.
- 3:30- 4:30—"Surgery", Dr. Babcock.
- 4:30- 5:30—"Obstetrics", Dr. King.

Tuesday, June 26

- 10:00-11:00—"Pediatrics", Dr. Casparis.
- 11:00-12:00—"Obstetrics", Dr. King.
- 12:00- 1:00—"Surgery", Dr. Babcock.
- 1:00- 2:30—Lunch—Speaker, Dr. King.
- 2:30- 3:30—"Pediatrics", Dr. Casparis.
- 3:30- 4:30—"Obstetrics", Dr. King.
- 4:30- 5:30—"Venereal Diseases", Dr. Wenger.
- 8:00- —Program, Alachua County Medical Society.

Wednesday, June 27

- 10:00-11:00—"Ear, Nose and Throat", Dr. Jackson.
 11:00-12:00—"Obstetrics", Dr. King.
 12:00- 1:00—"Surgery", Dr. Babcock.
 1:00- 2:30—Lunch—Speaker, Dr. Babcock.
 2:30- 3:30—"Pediatrics", Dr. Casparis.
 3:30- 4:30—"Obstetrics", Dr. King.
 4:30- 5:30—"Venereal Diseases", Dr. Wenger.

Thursday, June 28

- 10:00-11:00—"Gynecology."*
 11:00-12:00—"Medicine", Dr. Kolmer.
 12:00- 1:00—"Ear, Nose and Throat", Dr. Jackson.
 1:00- 2:30—Lunch—Speaker, Dr. Jackson.
 2:30- 3:30—"Surgery", Dr. Babcock.
 3:30- 4:30—"Medicine", Dr. Kolmer.
 4:30- 5:30—"Venereal Diseases", Dr. Wenger.
 8:00- —Reception, University Women's Club, in the Plaza of the Americas.

Friday, June 29

- 10:00-11:00—"Gynecology."*
 11:00-12:00—"Ear, Nose and Throat", Dr. Jackson.
 12:00- 1:00—"Medicine", Dr. Kolmer.
 1:00- 2:30—Lunch—Speaker, Dr. Kolmer.
 2:30- 3:30—"Surgery", Dr. Babcock.
 3:30- 4:30—"Medicine", Dr. Kolmer.
 4:30- 5:30—"Venereal Diseases", Dr. Wenger.

Saturday, June 30

- 10:00-12:00—"Medicine", Dr. Kolmer.
 12:00- 1:00—"Gynecology."*
 1:00- 2:30—Lunch—Speaker, to be supplied.

*Instructor to be supplied.

For further information, address Secretary of Short Courses and Institutes, General Extension Division, University of Florida, Gainesville, Fla.

VENEREAL DISEASE INFORMATION

For a number of years the U. S. Public Health Service has been publishing, for the information of physicians, health officers, and others, a monthly abstract journal known as "Venereal Disease Information." This publication contains usually one original article on a subject of general interest in connection with the venereal diseases and numerous abstracts from the current literature pertaining to these diseases. In the preparation of this abstract journal more than 350 of the leading medical journals of the world are reviewed and abstracts made of the articles on this subject.

The cost of "Venereal Disease Information" is only fifty cents per annum, payable in advance to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is desired to remind the reader that this nominal charge represents only a very small portion of the total expense of preparation, the journal being a contribution of the Public Health Service in its program with state and local health departments directed against the venereal diseases.

GOLF

A golf tournament among the members of the Florida Medical Association was held at the Timuquana Country Club, Jacksonville, May 1. Doctor H. J. Blackmon of Tampa won first prize with a gross score of 90, handicap 25, net 65. The low net score entitled the player to have his name engraved on the beautiful silver loving cup donated by the Orange County Medical Society several years ago.

Dr. Arthur H. Weiland of Coral Gables and Dr. B. W. Lowry of Tampa tied for the second prize which was an electric clock donated by J. K. Attwood, druggist of Jacksonville. This prize was for second low net score. Dr. Weiland's score was 79, handicap 10, net 69. Dr. Lowry's score was 87, handicap 18, net 69. Dr. Lowry won the toss and was therefore given the second prize. The third prize was won by Dr. Arthur H. Weiland of Coral Gables. This prize was for the low gross metal score. Dr. Weiland's score was 79. The third prize was a beautiful genuine leather Boston bag donated by Mr. Henry Parramore of the Surgical Supply Company. The fourth prize was won by Dr. J. Knox Simpson of Jacksonville. This prize was offered to the player who had the second low gross score. Dr. Simpson's gross score was 82. This prize was an ophthalmoscope which was donated by Mr. H. B. Nicholson of the American Optical Company. Dr. Russell Dean of Jacksonville won the prize for the highest gross metal score. His score was 116.

At the luncheon held at the Timuquana Country Club plans were made for a golf association within the membership of the State Association. Dr. William S. Manning of Jacksonville was elected president with power to divide the state into districts and appoint a vice-president in charge of each district. A complete outline of the plans of this organization will appear in a later issue of the Journal.

AMERICAN MEDICAL GOLFERS PLAY IN CLEVELAND, JUNE 11th.

The American Medical Golfing Association will hold its twentieth annual tournament at the Mayfield Country Club in Cleveland on Monday, June 11, 1934.

Thirty-six holes of golf will be played in competition for the fifty trophies and prizes in the eight events. The trophies include the Association Championship for thirty-six holes gross, the Association Handicap Championship for thirty-six holes net, the Choice Score Handicap Championship for thirty-six holes gross, the low gross Eighteen Hole Championship, the low net Eighteen Hole Handicap Championship, the Maturity Event limited to Fellows over 60 years of age, the Old Guard Championship, limited to competition of past presidents, and the Kickers Handicap. Other events and prizes will be announced at the first tee.

Dr. Homer K. Nicoll of Chicago is president and Dr. Charles Lukens of Toledo and Dr. John W. Powers of Milwaukee are vice-presidents of the American Medical Golfing Association, which was organized in 1915 by Dr. Will Walter, Dr. Wendell Phillips and Dr. Gene Lewis, and now totals 1,100 members representing every state in the union.

CLEVELAND COMMITTEE

The Cleveland Committee is under the chairmanship of Dr. John B. Morgan, 1301 Medical Arts Building, Cleveland, Ohio. He will be assisted by Drs. R. H. Birge, A. V. Boysen, E. F. Freedman, F. T. Gallagher, Secord Large, E. P. McNamee, J. J. Marek, Theodore Miller, U. V. Portman and M. A. Thomas.

APPLICATION FOR MEMBERSHIP

All male Fellows of the American Medical Association are eligible and cordially invited to become members of the A. M. G. A. Write the Executive Secretary, Bill Burns, 4421 Woodward Avenue, Detroit, for an application blank. Participants in the A. M. G. A. tournament are required to furnish their home club handicap, signed by the secretary. No handicap over 25 is allowed, except in the Kickers'. No trophy is awarded a Fellow who is absent from the annual dinner.

The twentieth tournament of the American Medical Golfing Association promises to be a happy affair, attended by some two hundred medical golfers from all parts of the United States.

STATE NEWS ITEMS

Dr. William Patterson of Tampa attended the Gill Spring Graduate Course in Eye, Ear, Nose and Throat at Roanoke, Virginia, during the month of April.

* * *

Dr. M. W. Spearman, late of Chickamauga, Ga., has opened offices in Lake City. Dr. Spearman is a past president of the Walker County (Ga.) Medical Society and lost no time in applying for membership in the Columbia County Medical Society.

* * *

Dr. William Henry Watters of Coconut Grove attended the meeting of the American College of Physicians held in Chicago, April 16-20.

* * *

Dr. L. Y. Dyrenforth of Jacksonville recently received the degree of Ch.E. (Chemical Engineer) at the University of Florida.

* * *

Dr. Nelson T. Pearson of Miami recently served as Ship's Surgeon for several weeks on the Canadian steamship, "Prince David", running from Miami to Nassau and Havana.

* * *

Dr. C. W. Bartlett of Tampa announces the removal of his offices to the third floor of the First National Bank Building.

* * *

Dr. Charles B. Mabry, Jacksonville, has been promoted from captain to major in the Medical Reserve Corps. At present Dr. Mabry is assigned to the Eighty-Second Division.

* * *

Dr. T. E. Morgan, until recently a district medical officer of the State Board of Health, has located in Lake City where he is temporarily associated with Dr. L. M. Anderson.

* * *

The American Association for the Study of Goiter will hold its next meeting in Cleveland, June 7, 8 and 9. This just precedes the meeting of the American Medical Association. The scientific program will be very comprehensive. Papers will be presented and clinics conducted by men from the United States and Canada whose work along this line has made them outstanding.

* * *

Dr. Thomas E. Buckman of Jacksonville addressed the local Lions Club recently. His topic was "Light and the A Body."

ROSCOE CONKLING HUBBARD

Dr. Roscoe Conkling Hubbard was born at Jaynesville, Miss., May 3, 1885, the son of William Jackson and Ella Magee Hubbard. He received his early education in the schools of Jaynesville subsequently attending the Mt. Olive High School and the Agricultural and Mechanical College at Starksville, Miss. Dr. Hubbard received the degree of M.D. at Mississippi Medical College, City of Meridian, May 11, 1912.

Dr. Hubbard began the practice of medicine at Bushnell, Florida, in 1913, and came to Tampa January, 1919, where he practiced until the time of his death.

While residing at Bushnell Dr. Hubbard was elected mayor in the year 1916. During the World War he served successively as first lieutenant, captain and major in the medical corps, U. S. Army, spending about one year and a half in the service. He was stationed at various posts in the United States, ending up in the Surgeon General's office in Washington, D. C.

Dr. Hubbard was a member of the First Presbyterian Church and fraternally he was a Mason, and Shriner, a member of the Modern Woodmen of the World, member of Hillsboro County Medical Society, Florida Medical Association and American Medical Association. He was elected president of the Hillsboro County Medical Society to serve 1928.

Dr. Hubbard was married at Bushnell to Pearl Harrison and has eight children, Eugene, Ann, Ruth, William J., Elizabeth, Lela, Margaret and Caroline.

He died March 24, 1934.

H. MERCER RICHARDS

Dr. H. Mercer Richards was born at Crawfordsville, Georgia, December 9, 1880. He died at his home in Lakeland, Florida, April 6, 1934.

Dr. Richards received his preliminary education in Sandersville, Georgia. He graduated from the Atlanta School of Medicine in 1909, following which he served an internship in Grady Hospital until 1911. In that year he began the practice of his profession at Nichols, Florida, where he remained until January, 1914. Since 1914 he practiced in Lakeland, where he was active in business and civic lines in addition to that of medicine. As a tribute to his business ability, he had been director in two banks and

active in the management of the Morrell Memorial Hospital.

Dr. Richards was a member of the Masonic order, Shrine, B. P. O. E., Knights of Pythias, Rotary Club, Woodmen of the World, the Polk County Medical Society, Florida Medical Association and the American Medical Association. He is survived by his widow, Mrs. Stella Nisbet Richards, and two sons, Billy and Morgan.

The following resolution was recently passed by the Polk County Medical Society:

RESOLUTION

Whereas, Divine Providence has seen fit to call Dr. H. Mercer Richards from his earthly labors to receive his reward in the Great Unknown and,

Whereas, by his untiring devotion to the practice of medicine, and by his continued sacrifices in the interest of charity and by his cheerful and optimistic services in civic and social relations, he endeared himself to his community and to the members of the Polk County Medical Society, we feel deeply the loss of our esteemed and beloved fellow physician; therefore be it

RESOLVED, That the Polk County Medical Society express its sorrow in the passing of Dr. H. Mercer Richards; that this resolution be entered upon a page of the minutes of this society, and a copy be sent to the surviving members of his family, and the same be published in the Journal of the Florida Medical Association.

R. R. SULLIVAN,
S. A. CLARK.

THOMAS FRED JACKSON

Dr. Thomas Fred Jackson, well-known physician and surgeon, who came to Dade City from Georgia in 1919, where he built up a large practice and established a hospital, died at his home March 21, 1934, after a long period of illness.

He leaves his wife and three children, Jane, Thomas and Anne; a sister and several brothers in Georgia.

Born March 30, 1888, at Covington, Georgia, Dr. Jackson graduated from Emory University Medical School in 1914. He was married to Miss Loral McHan, of East Point, Georgia. Dr. Jackson served on the Mexican border as a member of the National Guard and during the World War was a first lieutenant and captain of the Medical Corps of the 122nd Infantry with whom

he saw service in France. He was a member of the Phi Chi Medical Fraternity, Florida Medical Association, the American Medical Association, a former president of the Emory University Medical Alumni Association and the Pasco-Hernando-Citrus County Medical Society, and a former vice-president of the Midland Medical Society. He was a member of the Masons and was past master of the Dade City lodge, a member of the American Legion and a deacon in the local Presbyterian church.

Funeral services were held at Dade City, at three o'clock Friday, March 23rd, with the members of his local medical society acting as honorary pallbearers.

The Medical Women's National Association will hold its annual meeting in Cleveland on June 10, 11 and 12. The Hotel Cleveland has been chosen as headquarters. Dr. Anna M. Young, Mount Sinai Hospital, Cleveland, is the chairman of the committee on local arrangements.

* * *

Dr. T. S. Field of Jacksonville was elected president of the St. Vincent's Hospital staff recently. He succeeds the late Dr. John E. Boyd, who died in January. Dr. Frederick J. Waas was named vice-president and Dr. Robert B. McIver, secretary-treasurer.

* * *

Dr. Carl D. Hoffmann of Orlando left May 19th for Rochester, Minnesota where he will spend one week at the Mayo Clinic. Before returning home, he will take a month's post-graduate course at the University of Washington Medical School, St. Louis, working under Drs. R. Crossen and O. Schwartz.

* * *

Dr. A. C. Walkup of St. Augustine was recently appointed assistant chief surgeon of the East Coast Hospital. He will fill the vacancy occasioned by the resignation of Dr. Gordon Fletcher, who will go to California to make his home.

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COMPONENT COUNTY SOCIETIES

DADE COUNTY MEDICAL SOCIETY

At the meeting of the Dade County Medical Society held May 4th, the following program was presented:

"Diagnosis and Treatment of Glaucoma," R. M. Faver.

"Different Types of Surgery for Peptic Ulcer," (lantern slides), Ralph Gowdy.

DE SOTO-HARDEE-HIGHLANDS COUNTY MEDICAL SOCIETY

At the meeting of the DeSoto-Hardee-Highlands County Medical Society, held in Arcadia, April 10, Dr. Nathaniel L. Spengler of Tampa was guest speaker. Dr. Spengler presented a paper on "Hyperthyroidism in Infants and Children." It was decided to hold no meeting during the month of May owing to the State Association meeting in Jacksonville.

LEON-GADSDEN-LIBERTY-WAKULLA-JEFFERSON COUNTY MEDICAL SOCIETY

At the quarterly meeting of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society, held at the State Hospital, Chattahoochee, April 19, the following program was presented: "Surgical Notes on the Urinary Tract in Children", Robert B. McIver, Jacksonville. Discussion opened by J. C. Davis, Quincy, and B. A. Wilkinson, Tallahassee.

"Some Observations Regarding the Psychotic", A. T. Cobb, Chattahoochee. Discussion opened by S. M. Salley and J. L. Williams, Tallahassee.

"The Management of Squint", W. O. Martin, Jr., Atlanta. Discussion opened by M. C. Wilensky and H. M. Moore, Chattahoochee.

"Prevention of Puerperal Infection," L. L. Dozier, Tallahassee. (Read by title only.)

A business meeting was held following the scientific program. Later the doctors and their wives enjoyed a chicken dinner and dance.

MARION COUNTY MEDICAL SOCIETY

The Marion County Medical Society was host to doctors from surrounding counties on April 12 when a dinner was held at the Marion Hotel, at 7:30 p. m. Dr. Gerry R. Holden of Jacksonville presented a paper on "The Physician's Responsibility in the Cancer Problem", illustrated by charts and moving pictures. Dr. Edward Jelks of Jacksonville chose as his subject, "Diag-

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nosis of Malignant Conditions of the Intestinal Tract." His talk was illustrated by slides. The program was very much appreciated by those present.

ORANGE COUNTY MEDICAL SOCIETY

THE ORANGE COUNTY MEDICAL SOCIETY HAS TURNED IN 100% OF MEMBERSHIP DUES. THIS SOCIETY WITH A MEMBERSHIP OF FIFTY-ONE ACTIVE AND TWO HONORARY MEMBERS IS HEADED BY DR. J. R. CHAPPELL, PRESIDENT, DR. T. M. RIVERS, VICE-PRESIDENT, DR. J. A. PINES, SECRETARY, AND DR. H. A. DAY, TREASURER.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

THE PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY, WITH A MEMBERSHIP OF FIFTEEN, HAS REPORTED 100% OF DUES PAID FOR 1934. THIS SOCIETY IS ONE OF THE MOST ENTHUSIASTIC IN THE STATE. SCIENTIFIC PROGRAMS ARE CAREFULLY PLANNED AND HELD REGULARLY. CONGRATULATIONS TO THIS SOCIETY.

Dr. Claude Anderson entertained the Pasco-Hernando-Citrus County Medical Society at his home in Dade City, Thursday evening, April 12th.

Dinner was served at the Osceola Hotel from seven to eight o'clock, followed by a scientific meeting in Dr. Anderson's office.

Dr. John J. Bourke, of Dade City, was elected to membership in the society.

Resolutions on the death of Dr. T. F. Jackson were read and adopted.

Dr. Claude Anderson presented a case of a boy, four years old, with osteomyelitis, who is recovering without operation. Dr. Anderson also reported another case of a boy, ten years old, with osteomyelitis, who is under treatment.

Dr. L. F. Carlton, of Tampa, discussed the above cases, and Dr. Bundy Allen, of Tampa, showed very interesting x-ray pictures of osteomyelitis cases.

THOMAS FRED JACKSON

Whereas, God in His infinite wisdom hath seen fit to remove from our company one of our beloved members, Dr. Thomas Fred Jackson, and



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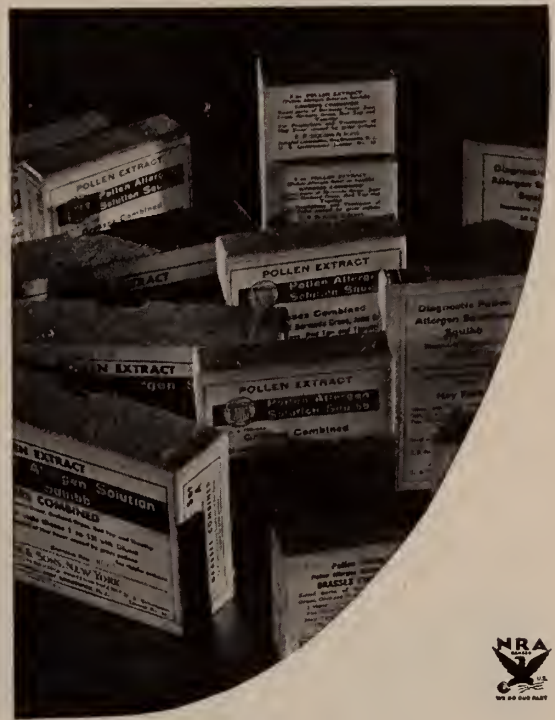
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Whereas, Dr. Jackson was one of the organizers of and a member for years of the Pasco-Hernando-Citrus County Medical Society, and

Whereas, he by his winning personality and friendship did endear himself to each and everyone of his acquaintances, and

Whereas, he by his untiring efforts to do good in his chosen profession was a great asset to his community, and

Whereas, we as members of the Pasco-Hernando-Citrus County Medical Society do deeply feel the loss of our beloved comrad, therefore, be it

RESOLVED, That the Pasco-Hernando-Citrus County Medical Society express its sorrow in the loss of our friend; that a copy of this resolution be forwarded to his family, and that a copy be spread upon the minutes of this Society.

THE PASCO-HERNANDO-CITRUS COUNTY
MEDICAL SOCIETY.

W. Wardlaw Jones, M.D.,
J. T. Bradshaw, M.D.,
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VOLUSIA COUNTY MEDICAL SOCIETY

At the meeting of the Volusia County Medical Society held April 10, the following resolution was passed:

"CLYDE C. BOHANNON

Whereas, Dr. Clyde C. Bohannon, a member of this Society, passed this life on the day, January 29, 1934, and

Whereas, the members of the Volusia County Medical Society desire to express their appreciation of his worth as a physician and citizen, now, therefore,

"BE IT RESOLVED, That the Society adopt and spread upon the minutes of the Society at its meeting here at DeLand, April 10, 1934, this resolution to express their profound sorrow at his passing and that a copy of the resolution be sent by the secretary to his widow and family and the State Medical Journal."



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The Duval County Medical Auxiliary was hostess to the State Medical Auxiliary at the 61st annual convention of the Florida Medical Association which convened in Jacksonville April 30th, May 1st and 2nd. Headquarters were at the Mayflower hotel.

One of the most interesting events of the occasion was the "Microbe Party" given in the assembly room of the Mayflower hotel on Monday night, honoring the wives of visiting physicians and surgeons. Guests were seated at 25 tables. Without a microscope the guests found it very difficult to discover the different parts of the anatomy of the microbe. Though, judging from the new forms of micro-organisms pictured by the women that night, the doctors may have valuable information that will lead to the discovery of new causes of diseases.

Despite an overcast sky and a gray mist from the St. Johns river the beautiful home of Dr. and Mrs. S. A. Morris, Villa Sol-vista, at Granada, presented a lovely scene with its hospitable rooms and terraces filled with the many guests invited to enjoy a buffet luncheon in this luxurious home on Tuesday at 1 o'clock.

All arrangements were in the capable hands of Mrs. Frederick J. Waas who with the assistance of her committee left nothing undone to make the day a pleasant one, and one long to be remembered.

One of the most gracious gestures of hospitality extended the visiting wives of the Florida Medical Association was the tea given at St. Vincent's Hospital from 4 to 6 o'clock Tuesday afternoon. The tea table, overlaid with an exquisite cloth and with a centerpiece of radiance

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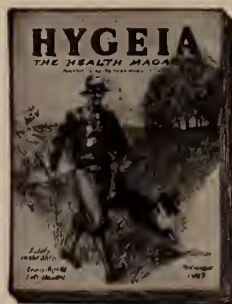
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roses and white larkspur was further enhanced by tall tapers in silver candelabras. Mrs. Vincent Armstrong and Mrs. Frederick Waas poured tea during the afternoon.

The business meeting of the State Medical Auxiliary was opened by Mrs. Gordon Ira of Jacksonville, Tuesday morning, 9:30 o'clock, in the Assembly room of the Mayflower hotel. Mrs. Ira asked the members to stand and repeat the club woman's prayer in unison. She then introduced the president, Mrs. E. G. Peek of Ocala, who presided over the meeting.

Mrs. Peek presented Dr. W. M. Rowlett of Tampa, the outgoing president of the Florida Medical Association, who gave a most interesting and inspiring address. He commended the women for their outstanding work in the Auxiliary and urged them to cooperate with other organizations and use their influence to promote better health conditions in the communities in which they live. He said he would like to see the women take up more space in the Journal and emphasized the social column which could be made very interesting to their neighbors.

Dr. T. M. McDuffee, chairman of the advisory committee to the State Medical Auxiliary, followed Dr. Rowlett with a very able talk on the possibilities of the Auxiliary. He urged the women to cooperate in trying to bring about such legislation as would promote public health and do away with so many quacks who play on the sympathy and ignorance of the people.

Mrs. Herrman H. Harris of Jacksonville gave a splendid address of welcome and received much applause.

Mrs. R. C. McMurray of Bartow responded in her very gracious manner and thanked the women of Jacksonville for their cordial hospitality.

Mrs. E. G. Peek, the retiring president, read a most interesting paper on the work that was accomplished during her administration. She thanked the women for their loyalty and support and commended them for their interest in defeating certain legislative bills that were not approved by the Medical Association. She urged them to continue their interest in all health movements and said she hoped they would be as true and loyal to the incoming officers as they had been to her.

Many interesting reports were read from the various auxiliaries throughout the state. The meeting closed with the election of officers.

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SCHEDULE OF MEETINGS—COMPONENT SOCIETIES FLORIDA MEDICAL ASSOCIATION

COUNTY SOCIETY	SECRETARY	MEETINGS				Dues Paid.
		Date	Time	Place	Luncheon?	
Alachua	Harry M. Merchant, M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	86%
Bay	Allen H. Miller, M.D., Millville.					71%
Brevard	I. K. Hicks, M.D., Melbourne.	2nd Tuesday		Varies	Yes.	56%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	94%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	92%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.	2nd Tuesday	8:00 P.M.	Varies	Yes.	93%
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	80%
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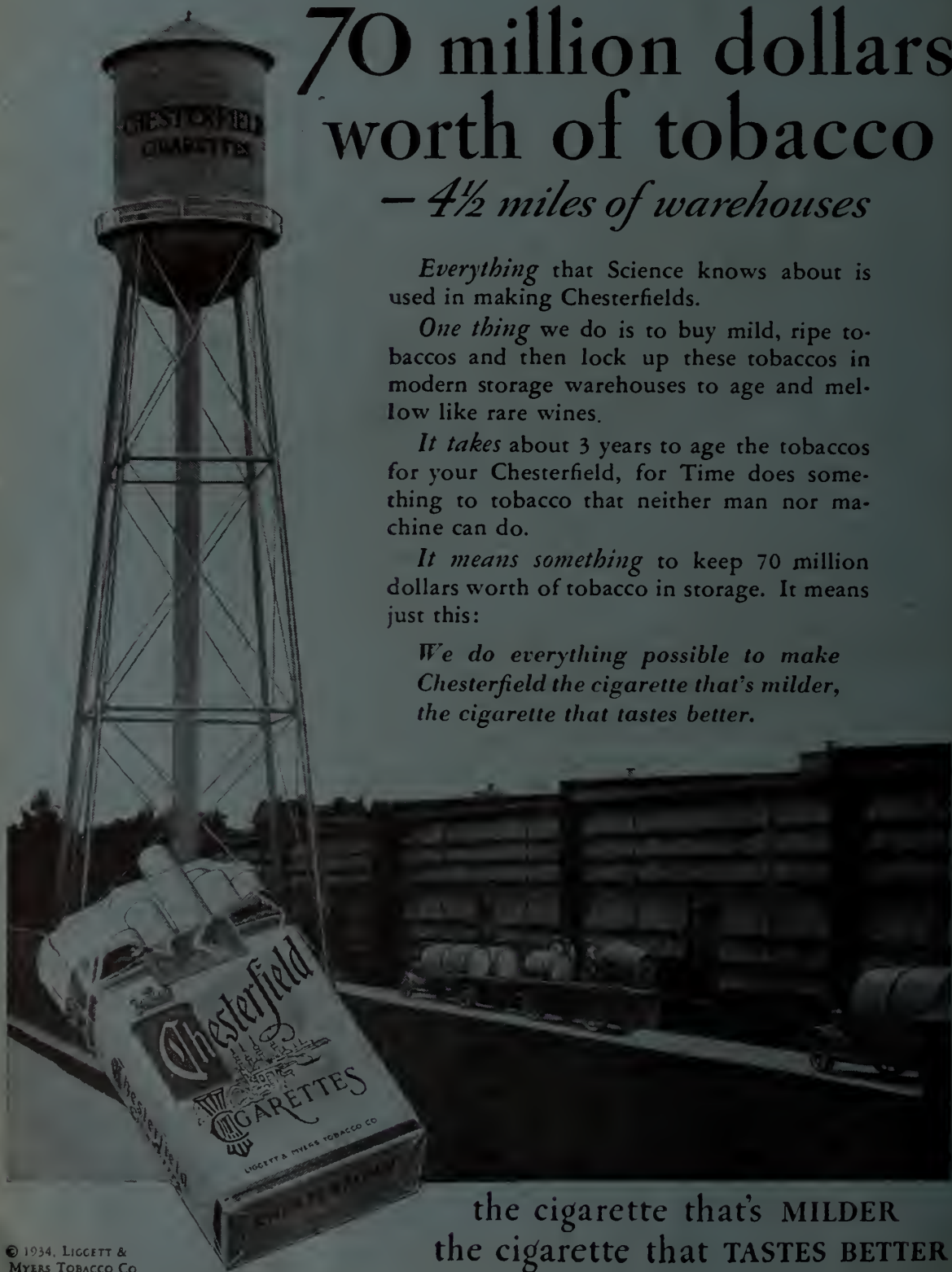
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THE JOURNAL

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Florida Medical Association, Inc.

OWNED AND PUBLISHED BY THE FLORIDA MEDICAL ASSOCIATION, INC.

VOLUME XX
NO. 12

Jacksonville, Florida, June, 1934

Yearly Subscription, \$3.00
Single Copy, 30c

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Southern Medical Association, San Antonio, November 13-16, 1934.

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

PUBLISHED MONTHLY

Volume XX

Jacksonville, Florida, June, 1934

Number 12

TREATMENT OF UPPER URINARY TRACT INFECTIONS*

E. CLAY SHAW, M.D.,
Miami.

My subject is of such breadth that this presentation must of necessity appear sketchy. The excuse for bringing such a time-worn subject to your attention is to discuss a few therapeutic procedures that have been added to our armamentarium during the past few years. There is nothing original in these remarks and, for the urologists present, probably nothing new.

Upper urinary tract infection is termed pyelitis, pyelonephritis, pyonephrosis or cortical abscess, according to the location and extent of the infectious process. While the etiological agent may be one of many bacteria, the most commonly found is the colon bacillus and related organisms. The staphylococcus and streptococcus are the next most frequently found. Since these organisms together account for fully 90% of kidney infections, we will direct our attention especially to these groups.

There has long existed a controversy among urologists and pathologists regarding the manner in which a kidney becomes infected. The ascending infection theory assumes that the bacteria reach the kidney through its drainage channel. The hematogenous theory assumes that the kidney becomes infected through its blood supply. It has been proven without doubt that each of these modes of infections occur in special instances, but there still exists a difference of opinion as to the common mechanism of infection. We know that it is difficult to produce renal infections in normal animals by injecting pathogenic bacteria into either the blood stream or into the kidney pelvis. It has also been shown that *B. coli*, introduced into the bladder of a normal man, will disappear from the urine within 48 hours.

Since the etiological organisms of kidney infection are always with us, we must assume that the body has a highly efficient mechanism of resistance; otherwise, our kidneys would be con-

stantly infected. There are conditions that we call predisposing factors that have much to do with the breaking down of this defense mechanism. By far the most important of these are urinary stasis and focal infection. Stagnation of urine at any point in the urinary tract offers a favorable opportunity for the development and growth of bacteria. Such stagnation may be produced by obstruction to the free flow of urine at any point from the kidney calyx to the urethral meatus. The more common obstructions in the lower urinary tract are urethral stricture, obstruction from pathology of the prostate, or injury to the nervous mechanism of the bladder. In the upper urinary tract, it may be produced by stone, ureteral stricture or kink. In the chronic, non-febrile, ambulatory case of pyelitis, the question of urinary obstruction should be determined as early as possible. Intravenous pyelography affords a reliable and painless method of obtaining this information. Should a kidney be hydronephrotic or fail to excrete the drug properly, local treatment by cystoscopy and ureteral catheterization is indicated from the beginning and should be continued until the obstruction is relieved. In extreme cases, surgery may be necessary to remove obstructions. Any rational treatment of renal infection must include the removal or cure of any existing obstruction; otherwise, we are doomed to failure before we start.

The importance of focal infection can hardly be over-estimated. In staphylococcus infections, the most common foci are found in teeth, tonsils, sinuses, cervix uteri and in various skin lesions, such as furunculosis. Another focus of coccal infection that is of importance, occurs in the chronically inflamed prostate and seminal vesicles. An abscessed tooth or chronically infected tonsils will often nullify all treatment that may be directed toward the infected kidneys.

By far the most important source of bacillary infections of the kidney is a deranged intestinal tract. It is from this source that the large group of colon bacillus pyelitis cases originate. A careful questioning of the patient with this type of infection, will nearly always reveal a history of chronic constipation, attacks of diarrhea, or other

*Read before the Sixty-first Annual Meeting of the Florida Medical Association, Jacksonville, April 30, May 1 and 2, 1934.

intestinal symptoms that they often describe under the vague term of colitis. Such cases may respond quickly to urinary antiseptics, but are prone to recur at a later date. Under this heading should also be mentioned that interesting group of cases in which the urine contains bacilli without pus. This condition is frequently overlooked, due to the fact that the usual laboratory report does not give the necessary information. It has been the routine in my office practice to examine a stained smear of the sediment of a centrifugalized specimen of all urine immediately after collection. It is surprising in how many instances one will find myriads of bacilli without pus. The presence of bacteria without pus in freshly voided urine means that the organisms have their origin in another part of the body and are being conveyed by the blood stream or lymphatics to the kidneys and that the latter are being used as a filter. The French have aptly termed this condition the entero-renal syndrome. Obviously, treatment in such cases, should be directed chiefly to the intestinal tract rather than to the urinary tract. I have seen many cases of bacillary infection clear up by simple remedies directed toward the relief of constipation. In other instances, the problem is more difficult. Colonic irrigations and intestinal antiseptics are sometimes helpful. I have one patient who keeps his urine clear of infection by a weekly dose of calomel; whenever this is omitted, the urine promptly shows bacilli. My experience with yeast, bacillus acidophilous and other measures designed to change the intestinal flora, have not been encouraging. I have seen several long-standing cases of colon bacillus pyelitis clear up after the removal of a chronic appendix or gall-bladder. This is undoubtedly a field in which close cooperation between the urologist and the gastro-enterologist works to the advantage of the patient.

The most complete and scientific evaluation of the bactericidal qualities of urinary antiseptics was brought out by Edwin Davis in 1932. He gave pyridium, hexylresorcinol (caprokal), methenamine and acriflavine to ten individuals in the usual doses and inoculated the urine passed 2-4-8 hours later with cultures of *B. coli* and staphylococci. The results showed that pyridium and hexylresorcinol were practically without bactericidal properties, that methenamine had very high bactericidal properties and that acriflavine had the highest of all. The acriflavine was ad-

ministered in capsules and was attended with considerable gastro-intestinal distress. Acriflavine in shellac-coated pills was not efficacious. He concluded that methenamine was the most valuable of the urinary antiseptics but that acriflavine could be used in selected cases. My personal clinical experience is in accord with these conclusions. I have found that very few patients can tolerate acriflavine in therapeutic doses. We have used methenamine quite extensively and like it best of all. It should be given in large doses; quantities under 45 grains per day are rarely effective. Oral administration can be supplemented by intravenous injections without any unfavorable reaction. We have given 90 grains of methenamine daily for weeks without noting toxic symptoms. Helmholz has shown that the bactericidal action of methenamine is in direct proportion to the acidity of the urine. It is usually necessary to administer an acidifying agent with the methenamine. Methenamine is a very useful prophylaxis against urinary sepsis in prostatic resection cases. We routinely give 30 grains by mouth and two intravenous injections each day for one week after resection and have noted a definitely lowered incidence of post-operative fever. Intravenous injections of neoarsphenamine have been found to be efficacious in coccal infections.

The ketogenic diet has proven to be a valuable therapeutic procedure in clearing the urine of bacteria in selected cases. Helmholz made the chance observation that urine from an epileptic patient, receiving a ketogenic diet, remained sterile after standing around for a week. Subsequent studies showed that urine from individuals on such a diet frequently had strong bactericidal powers. Clark has published several clinical articles on this subject. The most recent and complete may be found in the February issue of the *Journal of Urology*. At present, he recommends a diet containing 15 grams of carbohydrates, 52 grams of protein and 225 grams of fat. Ammonium chloride or nitrate is given in sufficient quantity to produce urine with a pH of 5.3 or lower. After two or three days with such a diet, acetone and diacetic acid appear in the urine, and simultaneously the urine develops bactericidal properties. A. T. Fuller, a biochemist of London, in a recent publication, states that the bactericidal agent is B-oxybutyric acid.

Clark, in his recent article, has given an outline for the diagnosis and treatment of bacillary

infection that should be carefully read and digested by anyone planning to employ the ketogenic diet. Individuals that have difficulty digesting fat and acutely ill patients, can not take this diet. Patients with badly impaired kidney function do not do well. In some instances, for unknown reasons, ketosis fails to develop. Table I, taken from Clark's articles, gives his results in 146 cases.

TABLE I (Taken from Clark)

ORGANISMS	Satis- factory, Culture Negative	Unsatis- factory, Culture Positive
<i>Escherichia coli</i> (B. coli)	66	20
<i>Aerobacter aerogenes</i> (B. aerogenes)...	12	19
<i>Pseudomonas</i> (B. pyocyaneus)	16	3
<i>Proteus</i> (B. proteus ammoniae)	2	4*
<i>Salmonella</i> (including paratyphoid organisms)	1	1†
<i>Alcaligenes fecalis</i>	2	0
Total cases	99	47
Percent of total cases	68	32

*Two cases of polycystic kidney.

†Case of bilateral pyelonephritis.

I have been using the ketogenic diet in selected cases and certain difficulties have been encountered. My results have not, however, been as good as those of Clark. There has been a relatively high incidence of recurrence in my cases for over a year and have found it to be retarded. Unless the patient has access to an expertly directed diet kitchen, the carrying out of this treatment assumes that he possesses a rather high degree of intelligence in addition to perfect cooperation. I can report, however, several stubborn cases that, after resisting all other types of treatment, have cleared up and remained so with the aid of the ketogenic diet. It is remarkable how little discomfort is associated with this diet. Most patients who have improved are anxious to try it again after a suitable rest period. The only unusual reaction to the diet that I have observed was a marked hematuria which occurred three days after beginning the diet. The blood disappeared from the urine promptly on discontinuing the diet, but reappeared every time the treatment was started. I have no explanation for this occurrence.

The measures discussed above are more suited

for the chronic or subacute types of renal infections. We often see acutely ill patients with high temperature in which we are not so much concerned with ridding the urine of bacteria as we are with the reduction of the acute sepsis. Such cases, in my experience, are almost always associated with ureteral obstruction. Edema of the ureter, as a part of the intense acute inflammatory reaction, can provide as efficient a temporary block as a calculus. It is in such cases that the indwelling ureteral catheter is an efficient aid in providing temporary drainage, thereby shortening the illness and reducing permanent damage to the kidney. Harm can result from the injudicious use of the indwelling ureteral catheter. In 1927, I reported experiments on dogs with the indwelling ureteral catheter, that showed permanent damage was done the ureter by leaving large catheters in place over three days. To quote from the conclusions of this clinical and experimental report:

"Drainage of the infected kidney with the inlying catheter in appropriate cases is a valuable procedure. In obstinate cases of acute pyelonephritis, the temperature can often be brought to normal and toxic symptoms relieved within twenty-four hours by the insertion of an inlying catheter. There are cases of pyelitis of pregnancy in which other therapeutic measures will fail and only the use of the inlying catheter can obviate the necessity of therapeutic abortion. Pyonephrotic kidneys can at times be saved by a period of inlying catheter drainage, while in other instances, where the patient has become debilitated from long-continued absorption of toxic products from an incompletely drained pyonephrosis, the condition may be so improved that nephrectomy can later be performed with greater safety."

"While we recognize the value of the inlying catheter, clinical observations and animal experimentation have led us to believe that permanent injury may be done the ureter by its injudicious use. The ureter is a delicate structure with an intricate physiology and will not withstand for an indefinite period the presence of a catheter sufficiently large to keep it in a state of continuous tension. The danger would appear to be even greater should the catheter be placed in the acutely inflamed ureter. We believe that inlying catheters larger than number 6 French should rarely be used in acute pyelonephritis and that they should not be allowed to remain in place

continuously longer than twenty-four hours. In long-standing pyonephrosis the pus is usually thicker, and catheters smaller than number 8 French may become obstructed; but it seems advisable, even in these cases, to employ as small catheters as possible. Should a catheter larger than number 8 French be absolutely necessary for drainage, it is probably best that it should not be allowed to remain in the ureter continuously longer than twelve hours."

In conclusion, I wish to emphasize that the two basic steps in the treatment of any renal infection is, first, the removal of obstructions to the free flow of urine, and, second, the clearing up of focal points of infection. Should it be possible to obtain these conditions before too much permanent damage is done the kidney structure, the body's defensive mechanism will resume its function and rid the kidney of bacteria. With the acceptance of this hypothesis, it follows that the employment of urinary antiseptics and the ketogenic diet, as valuable as they are, should be regarded as auxiliary or palliative measures, and should not be considered as the primary means of obtaining a cure. In other words, should a complete sterilization of an infected urinary tract be obtained by chemical agents and the basic causes not be corrected, we may expect a recurrence. Unfortunately, clinical experience bears out this assumption too well.

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DISCUSSION

Dr. R. W. Blackmar, Jacksonville:

Dr. Shaw's paper is so thorough that it leaves very little to be said.

I will add a few remarks on that type of pyelitis not due to obstruction.

Each case should be given a thorough study

to determine the best method of treatment. Quite frequently these patients show evidence of an unbalanced diet which lowers the body resistance to infection, so that the usually harmless colon bacillus finds a favorable soil in which to grow.

The arsenicals are frequently specific for gram positive cocci and intravenous mercurochrome acts better on gram negative organisms.

The case mentioned by Dr. Shaw in which the bacilluria was controlled by weekly doses of calomel could have been due to the mercury stimulating phagocytosis or the reticulo-endothelial system in the intestinal wall and Peyer's patches.

Selected cases respond nicely to the time-honored method of changing the pH of the urine from acid to alkaline if methenamine is given in the acid periods and acriflavine, as mentioned by Dr. Shaw, during the alkaline course. The usual patient tolerates three grains a day for about six days only. The gastric irritation ceases as soon as the drug is discontinued.

I have had no experience with posterior pituitary gland or pitressin in pyelitis of pregnancy, but good results have been reported.

After two years' experience with the ketogenic diet in upper urinary tract infections, I am very favorably impressed. The great difficulty is in getting the ambulatory patient to restrict his diet enough to obtain ketosis. However, the ferric chloride test for diacetic acid is a good index as to his conscientiousness in his diet.

A few stubborn cases which were due to other foci of infection have responded nicely to water soluble urinary protease, which seemed to exert a beneficial influence on the focus as well as on the pyelitis.

HYPOTHYROIDISM WITHOUT MYXEDEMA*

NATHANIEL L. SPENGLER, M.D.,
Tampa.

Endocrine disorders constitute about 5% of all the diseases of children. In early infancy they are characterized principally by nervous manifestations followed by a failure in growth, and a disordered metabolism of water, sugar, and fat.

The endocrine needs of the fetus are cared for by the mother during the first eight months of pregnancy, when the endocrine system of the

*Read before the Sixty-first Annual Meeting of the Florida Medical Association, Jacksonville, April 30, May 1 and 2, 1934.

fetus becomes active. The source of endocrine supply retained in the child from the mother is exhausted during the first two months of life; therefore, it is in the third and fourth months and the beginning of sexual development when the disorders are best recognized.

It is well known that cretins should not marry because they are sufferers from thyroid deficiency and will produce offspring with thyroid disorders even though they may be mated to a normal individual. It has been my observation that in a large family of children there are frequently great variations from a normal thyroid secretion among children even though the parents have no thyroid deficiency. There are also families in which all members for several generations present normal thyroid secretions and are a normal, robust, healthy lot, but occasionally one may be present that shows a thyroid deficiency. A normal child-bearing mother may fail to increase her thyroid output during pregnancy and give birth to a child that is hypothyroid. It is also true that a hypothyroid mother may upon becoming pregnant so increase her thyroid that she will supply ample secretion both for herself and child, while during her next pregnancy she may fail to function her thyroid and give birth to a child deficient in thyroid. If the child has received ample thyroid during intra-uterine life it should show a normal growth at birth and be a normal child.

There is no reason to doubt that the amount and quality of the endocrine secretions in various family strains are as much the expression of hereditary factors as are many other individual characteristics. The hereditary aspect of these glands is likely to be overlooked, because they are subject to environmental modifications and because one is accustomed to think of them in terms of their immediate activities instead of their genetic constitution.

The results in crossing various breeds of dogs demonstrates that the causes lying back of certain freakish types depends on the relative activities of the endocrine glands, and are really based on genetic factors which affect these glands. Since similar anomalies occur in man, in him likewise, the underlying causes are doubtless genetic in nature. The achondroplastic dwarf is closely parallel to the condition that produces the bull dog face; twisted arms and legs suggest similar conditions found in the bull dog.

A typical nursing cretin is recognized with a great deal of difficulty in the first 6 to 8 weeks of life showing beyond doubt that a certain amount of thyroid from the mother is retained and used from 6 to 8 weeks. After the supply from the mother is used there comes a period of inactivity of growth and if this is not recognized a typical cretin is developed. If you could see a cretin who had been fed thyroid from birth for 8 to 10 years and then see the same patient after thyroid had been withheld for 8 months I am sure it would be a picture never to be forgotten and it would impress upon you the far-reaching influence of thyroid deficiency.

Thyroid secretion varies in the life of children more than in adults, because the body functions of immature individuals are more susceptible to outside influences. The variations in the types of hypothyroid children makes them hard to classify, and knowledge is obtained by long and tedious training in studying hypothyroid groups, and observing the results of thyroid and allied endocrine products administered over long periods.

Among some of the more common disorders in growing children partly due to thyroid disorders is a failure to gain weight and height for a year or more accompanied by a loss of appetite, lethargy, fatigue, dry skin, hair, plugging of sebaceous glands, failure to sweat, periodic attacks of urticaria, subnormal temperature, cold hands and feet, senile appearance of hands, feet, and neck, general atonic condition of entire muscular system accompanied by various degrees of bad posture, such as lordosis, drooping shoulders, pendulous abdomen with prolapse of abdominal viscera, and constipation. Diet, purgatives, massage, sunshine, iron and general care give some relief but permanent and lasting results are brought about by the administration of thyroid. With thyroid administration metabolism is increased, detoxication is commenced, muscle tone is improved, skin and hair is improved, the capillary pattern is improved and a general trend to a normal child is gradually brought about.

The type of patients mentioned constitutes the more pronounced ones, but there are as many variations from normal as there are individuals involved, so we must learn to recognize and treat them accordingly.

Any diseased condition of a prolonged type

upsets the normal body function and reduces it to a state of uselessness; likewise, it upsets the function of the endocrine glands which helps to further prostrate the patient and prolong his illness. I believe we are accustomed to overlook this important point in the treatment of patients and until we take advantage of our present knowledge of endocrine therapy we are neglecting one of the greatest aids to the rapid recovery of this class of patients.

The theory of heredity and transmission of cretins is an accepted one, but little has been said about patients who are classified in the hypothyroid group. The latter has been proven in my work by demonstrating that mothers able to take from 4 to 10 grains of thyroid daily produce children who almost without exception are hypothyroid to some degree. Intoxication during pregnancy can be almost entirely prevented by prescribing thyroid after the urea standard of the blood reaches more than 150 mg. per liter (determined by the method of Van Slyke and Cullen) while the maximum blood pressure is more than 100 mm. of mercury. It is by this method that the number of stillborn infants in the clinic and polyclinic in Leyden was reduced from 3.3% to 1.08% (H. Van Der Hoven-Nediol. *tijds-chi V. genusk* 76:143 Jan. 9, 1933).

After diagnosis is made by physical examination, metabolism reading and x-ray, the next step is to find the patient's tolerance to thyroid. This must be accomplished without shock to the patient. Tolerance varies in the same individual and a patient who has been taking 10 grains a day for years will require half of 10 grains and at times more.

Thyroid disorders in a nursing mother and her child will explain many of the failures of mother and infant to successfully carry on breast feeding. Mothers who fail to successfully nurse their children are of the fat, short, pudgy type, overweight, lethargic with coarse hair, dry skin, cold and clammy feet, poor resistance to cold, have headaches, are constipated and do not perspire freely. There is almost always a senile appearance of skin of neck, hands, and feet, indicated by deep wrinkles in skin of neck and hands.

The hypothyroid infant at birth is termed a good baby, does not cry as much as it should, and the skin and general body gain is below normal. When placed to the breast it is slow to nurse, easily tires, and nurses in an indifferent manner.

As a result of these handicaps the infant nurses very little, does not make sufficient demands on the breast, and by its failure to empty the breasts the milk supply diminishes. The child becomes dehydrated and artificial feeding is resorted to to save the baby.

This problem can be avoided by recognizing the endocrine deficiency in mother and giving treatment during pregnancy and this has been proven in a few cases, but not in numbers sufficient to establish the fact beyond doubt. Records do not give ample information on this subject, except to state that hypothyroidism is recognized and should be treated to keep the weight of patient within reasonable limits, increase general muscle tone of body and uterus, and secure a more successful labor and post partem recovery for the mother.

Excluding the anatomical lesions of the uterus and pelvis the hypothyroid mother constitutes a large group of prolonged labors, followed by profuse hemorrhage and a delayed post partem recovery. Children born under such conditions are subjected to the usual dangers of prolonged labor.

The above conditions account for a large number of deaths in the first month of life as well as a large number of brain injuries, epileptics, and mental defectives.

The pediatrician should have full access to all the information gained by the obstetrician and dentist during their nine months observation of the patient. With close cooperation between the three specialties the pediatrician should be able to diagnose his endocrine cases from birth and begin treatment to be carried to a successful termination at the conclusion of child life.

Many vague ideas exist about the dose of thyroid. It is considered by the profession a drug to be given with the greatest caution while the laity is using it in an indiscriminate manner.

The basal metabolism of children with normal basal metabolic rates do not appear to be influenced by thyroid administration and, hence, basal metabolism should not be the only criterion of thyroid therapy, unless based on total heat production. "Thyroid extract increases the phase of metabolism which is dominant in the individual, anabolic in the child and catabolic in the adult."

The author wishes to call attention to four groups of hypothyroid patients without myxedema. Where any of the patients have

responded to thyroid therapy, they have been classed as hypothyroids. The first group was composed of ten girls fifteen to twenty years of age. All were of the linear type except two. The second group was composed of forty mothers twenty-five to thirty-five years old. Ten were of the linear type, thirty of the lateral type. All of the lateral type returned to normal weight and have remained at a normal weight without regard to diet at the end of the treatment. The third group consisted of fifty hypothyroid infants of forty hypothyroid mothers. The fourth group consisted of two hundred children suffering from hypothyroidism, age ten months to fourteen years.

The above groups were free from any organic disease and thyroid therapy was the only medication used in the first, second, and fourth groups.

This paper is presented not because of any unusual claim the author might have of knowledge of the subject, but to stimulate an increased clinical study of all patients for a possible thyroid deficiency.

SUMMARY

The observations included in this paper are based on the author's observation of hundreds of children in private practice for different degrees of hypothyroidism without myxedema over a period of ten years.

As the studies were continued it was observed that many mothers of these hypothyroid children were hypothyroid to some degree. Many of these mothers had difficult labors, nursed their children with difficulty, and had a typical senile appearance of neck, hands, feet and skin. The senile appearance in these hypothyroid mothers is best illustrated by comparison with other normal individuals of same age or even older. The contrast is marked.

Mothers and children were given thyroid in gradually increasing doses to a point of tolerance and improvement has been truly remarkable in both mother and child. In no instance has shock been produced by this method.

The same senile appearance of skin of hands, neck, and feet was observed in children as well as in the mothers. There are great variations in the senile symptoms. It is hoped by treating hypothyroid children without myxedema early and over a sufficient length of time a normal functioning set of glands can be developed by the time they reach maturity.

DISCUSSION

Dr. James Boulware, Lakeland:

Dr. Spengler has presented a very interesting paper. His observations on hypothyroidism in mothers with resulting hypothyroidism in children are unique because very few such observations are reported in medical literature. I think that his paper is very stimulating and interesting to all of us who handle children.

I certainly wish to commend Dr. Spengler for this paper.

Dr. T. Z. Cason, Jacksonville:

This is a very interesting paper. My own studies in hypothyroidism in children have been confined to the adolescent group. I have, therefore, had no experience with the child during early life, but it is possible that if the hypothyroid state were recognized early, there would be many fewer cases found during adolescence. What is more important, however, is the early recognition of the myxedematous child that treatment may be instituted early enough to prevent retardation of normal development.

Hess, in a paper on "Creatine Metabolism and Blood Cholesterol as Aids in the Diagnosis and Treatment of Hypothyroidism in Children," read before the recent meeting of the American College of Physicians, indicated that the blood cholesterol is a better index to this condition than the basal metabolic rate and much easier to determine. He noted that in the markedly hypothyroid state in infants the blood cholesterol would sometimes exceed 400 and would promptly recede on the administration of thyroid extract. The determination of this condition in early infancy is difficult, but its early recognition with the institution of proper treatment will prevent later abnormalities.

Dr. Spengler's statement regarding the genetic influence over the hereditary characteristics of the endocrine secretions is worthy of special attention. There is no proof that his statement is correct, but his reasoning is good and I believe his deductions are sound. Those interested in similar studies should bear the genetic factors in mind.

The observations of Dr. Spengler serve to stress forcibly the necessity of a careful study of the infant by the trained specialist whenever the slightest abnormality is evident.

OTITIS MEDIA*

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Infections of the middle ear are almost always the result of or an extension of inflammation or infection through the eustachian tube. The usual cause for this extension of a cold in the head or chronic sinus disease is improper blowing or douching of the nose, whereby infected material of the nose or naso-pharynx is forced into the eustachian tube. Swimming, especially diving and surf-bathing, wherein a similar infected fluid gets into the eustachian tube, is a common cause.

The presence of adenoids which are always more or less infected is a frequent source of ear trouble and the same may be said of acute attacks of tonsillitis. Many of the infectious diseases such as measles, scarlet fever, diphtheria and whooping-cough, are accompanied by acute otitis media. The disease also occasionally follows nasal and pharyngeal operations; especially is it apt to follow those cases where the hemorrhage is such as to require post-nasal plugging for the control of hemorrhage. I believe it also occurs more commonly after nasal operations when packing is used than when it is not used.

Pathology: The pathology that results from an acute infection is first a hyperemia and swelling of the mucous membrane of the eustachian tube and later of the mucous membrane of the tympanic cavity. Following this hyperemia there is a secretion from the mucous membrane which in the early stage is serous, and in mild cases nearly if not quite sterile. Very probably in some of the milder attacks this is as far as the pathology extends. In such there is often an evacuation of the serum through the eustachian tube into the naso-pharynx. In the more severe infections following the serous secretion there is an outpouring of mucus and a little later the formation of thick purulent secretion. The secretion may be the same color as that from the nasal infection but owing to the rupture of the capillaries of the mucosa it is very frequently bloody, that is either sero-sanguinous or sero-purulent. In the later stages the blood disappears and we have a frank purulent secretion. What, then, becomes of this secretion from the mucous membrane of the middle ear? As above stated, with a small amount of serum secretion it probably escapes either by evacuation through the eustachian tube or is absorbed. On the other hand,

with the more severe inflammatory process and greater abundance of secretion the drum membrane is bulged outward, mascerated, and spontaneous rupture of the drum membrane takes place with a discharge from the external auditory canal. Before this takes place if the discharge is at all abundant some of it backs up through the attic and mastoid antrum into the mastoid cells causing an infection there which is either limited to the few mastoid cells close to the tympanum or the process extends and invades each and every mastoid cell. In mild infections the tension upon the thin mastoid cells is not very great, and one cell discharges into the next and so on until all of the secretion is evacuated through the attic to the middle ear and out into the external auditory canal. If there is considerable tension the pressure within the cells may cause necrosis and rupture with the formation of a small or large abscess in the mastoid or there is an absorption of the bony plate over the lateral sinus and a peri-sinus abscess develops. If bacteria pass through the wall of the lateral sinus, a sinus thrombosis will occur. From pressure, an absorption of the floor of the cranium may take place and an epidural abscess may be formed on passing through the dura pia mater and arachnoid and entering the brain a cerebral or cerebellar abscess may develop. Then either through the vault of the tympanic cavity or by the blood vessels, infection of the meninges may result in meningitis. If there are many cells in the petrous tip they may become infected, resulting in an abscess at the base of the brain or a meningitis. During all of these processes the membrana tympani (drum membrane) is thick, less vibrating; the ossicular joints are inflamed; consequently, there is a less vibrant membrane and the hearing is very much impaired. If none of the serious complications of an acute otitis media develops then resolution and restoration of function take place, but if these more serious pathological lesions are not recognized there is very apt to be a fatal ending for the patient.

The most common organism found in middle ear infections are streptococci, pneumococci and staphylococci. Of these, group 3 pneumococci and also the streptococcus hemolyticus are the ones most apt to be followed by invasion of the mastoid cells and to such a degree as to require fairly early operative interference to prevent serious complications.

I am in the habit of dividing the infections of the middle ear into three grades, but it must not be understood that there is a marked separation

*Lecture delivered at First Post-Graduate Medical Course, Gainesville, June 19-24, 1933.

in these grades. The mildest grade I designate tubo-tympanic congestion. In this there is a congestion of the eustachian tube and also of the mucous membrane of the middle ear or tympanum. There is but little secretion poured out in this process and the condition is more frequently discovered during the routine examination of the nose and throat during an acute inflammation or in the presence of adenoids.

The appearance that one considers tubo-tympanic congestion, is a redness or pinkness of the membrane in Shrapnell's area; a very slight degree of pinkness in the rest of the drum membrane; a fore-shortening of the long handle of the malleus owing to obstruction in the eustachian tube and the prevention of free ventilation of the middle ear through the eustachian tube. This is a condition exceedingly common in children. When the hearing is tested there is usually found to be some impairment of hearing, a loss of 15 to 20%. Older people, if they have it, will complain of a little fullness and possibly a little ringing in the ear. There is no elevation in temperature with this condition and the blood count is normal. I speak of it in children because it is so common in them and so frequently a cause of impaired hearing, as well as a cause of an apparent dullness in school. It is an indication of adenoids, or if the adenoids have been removed or have been removed imperfectly, it usually denotes the presence of considerable adenoid tissue in the naso-pharynx around Rosenmüller's fossae.

It is quite likely that this tubo-tympanic type in many cases is not a true infection but simple interference with the normal function of the mucous membrane in the eustachian tube and tympanic cavity.

Second Acute Catarrhal Otitis Media: A more severe involvement of the middle ear comes under the recognized class of acute catarrhal otitis media. Here we have to deal with an infection of a mild character. The mucous membrane of the eustachian tube and middle ear are much more involved; the secretion usually passes beyond the serous stage to a mucoid stage. It is usually not accompanied by any involvement of the mastoid.

Its symptoms are a considerable degree of discomfort, even pain, in the affected ear, considerable impairment of hearing, invariably ringing in the ears (tinnitus). In children a very slight elevation in temperature. The blood count is practically normal or only slightly increased. Upon inspection the drum membrane shows a

slight fullness in the posterior or the lower portion of the drum depending upon whether the individual is lying down or sitting up; in other words, the fluid in the middle ear easily seeks its level either posteriorly or inferiorly according to the position of the patient. There is considerable redness of the drum membrane but one can usually see the short process and a little of the long handle of the malleus. In many of these cases there is complete resolution in three or four days. Other patients will have intermittent pain, especially at night, and this may go on for a week or ten days.

Acute Suppurative Otitis Media: In the third variety, acute suppurative otitis media, there is an acute process produced by a more or less virulent organism. Here the condition that one finds is a pain starting at a definite hour, usually in the early morning, marked impairment of hearing, ringing in the ears, temperature in adults oftentimes to 101 or 103, but in children sometimes to 104 or 105, oftentimes accompanied by convulsions. Any child having convulsions should have an aural examination as a possible source. Within a short time there appears a discharge from the ears—in children oftentimes within a few hours and in other patients not for two or three days if the drum membrane is thickened. In adults the spontaneous discharge does not come as early as it does in children by several hours. On examination of these patients the blood count, the white corpuscles, as well as the polys are considerably increased with an increase in the polymorphonuclears.

In all of these cases pressure over the mastoid *antrum* is painful very early in the disease, whereas pressure over the more distant parts of the mastoid may not be painful. The discharge from the canal at first is thin and perhaps blood-stained. As the disease progresses the discharge becomes thick and varies considerably in quantity according to whether there is little or much involvement of the mastoid cells. If the pledget of cotton placed in the external canal becomes saturated within three or four hours one can usually predict a disease limited to the middle ear with but little mastoid involvement. When the discharge soaks through the cotton within an hour or less one realizes that such an amount of discharge could not come from the small area of mucous membrane in the middle ear, but must come from an accompanying involvement of the mastoid cells. The maximum amount of discharge is usually on the 5th or 6th day in mild cases, gradually diminishing until within ten or

twelve days the discharge ceases. If, however, the discharge remains very profuse for a week then it is usual to find that pressure over all of the mastoid area is exceedingly painful, especially so at the tip and the posterior portion. It is in these cases that one requires an x-ray of the mastoid to determine the size of the mastoid and the extent of its involvement. If stereoscopic x-ray plates are taken one can usually see the rupture of the septa between the cells typical of an abscessed cavity. If the mastoid as shown in the x-ray is large and extensively clouded, the chances of a patient's recovery is not very good, because the distant diseased cells must drain through those nearer and again those still nearer to the antrum before they can discharge their contents into the middle ear. Such cases will require an earlier mastoidectomy than those where the mastoid cavity is shown to be smaller in size. Usually after two or three days, although the discharge may continue, the temperature may come down. In children owing to the softer bone of the cortex of the mastoid, rupture of the cortical portion of the mastoid takes place and a sub-periosteal abscess accompanied by swelling, redness and a sticking forward of the ear results. With such evidence of periosteal swelling a mastoid operation is indicated. If, on the other hand, the discharge lessens and finally stops, in a few cases the opening in the drum membrane closes before all pathology in the middle ear subsides. As a result there is recurrence of pain and again a discharge for a day or two. If on being called to a case of earache one finds a red bulging membrane with all of the landmarks of the ossicles absent an immediate incision of the membrane tympani should be done to permit the evacuation of the contents of the middle ear.

I am firmly of the opinion that an adequate incision made in the membrana tympani before the secretion has had an opportunity to back up into the mastoid cells, betters the chance of the patient to escape a serious mastoid infection. This incision should be made under general anesthesia, gas oxygen preferably, but in small children we often use chloroform. The incision should be begun in the lower part of the posterior portion of the drum membrane and carried up into Shrapnell's membrane. When we advise incising a drum very frequently the mother will exclaim, "I do not want the ear punctured because it will impair the child's hearing." This is another fallacy for in no case have I ever seen any impaired hearing result from a proper incision. I can readily understand how an unskilled surgeon could destroy the ossicles and do other

damage. I desire to impress upon the physician that practically every case of acute suppurative otitis media is accompanied by an acute involvement of the mastoid, but this does not mean that all of these cases will develop a degree of mastoiditis as to require operation. These cases should be seen daily. When there is evidence of extensive mastoiditis, as shown by the amount of discharge, continuation of pain, drooping of the superior canal wall and an x-ray showing destruction of cells, an immediate mastoid operation should be performed. Very often in these acute cases there is no elevation in temperature after the first few days. The family, owing to the absence of fever, often objects to the mastoid operation. Absence of fever accompanied by the above conditions should not deter the physician from insisting upon a mastoidectomy.

Treatment: All patients suffering from acute otitis media should be confined to bed. In the tubo-tympanic and acute catarrhal types, contracting the nasal mucosa with ephedrin and douching gently through the external auditory canal with warm saline, T. 105, gives great relief, and lessens the congestion. In acute suppurative otitis media, if the drum is bulging, promptly incise it. If spontaneous rupture has taken place, and discharge is scanty and yet there is considerable pain, incise, as the probability is that the spontaneous opening is insufficient for good drainage. When there is a discharge one has the choice of two methods of treatment, viz.: placing pledgets of cotton or gauze in the canal and replacing them as often as they are soaked through. This is my preference. It enables one, if the pledgets are saved to estimate the amount of the discharge and tell from day to day whether it is increasing or decreasing. In the later stages when the discharge may be very thick and partially blocking drainage a careful syringing of the canal may be done once a day by the physician. Some prefer having the ear syringed several times a day. This requires care and skill which is not possessed by every trained nurse and few mothers. I feel that some cases of serious mastoid involvement have been induced by the irrigations which have carried secondary bacteria in the external auditory canal through the drum into the middle ear and mastoid.

The skin of the canal and ear should be protected with some antiseptic ointment such as 2% ung. hydrarg. ammoniate to prevent the dermatitis and furuncles which often follow when this is not done.

THE PRACTICAL PRESENT DAY CONCEPT OF ANEMIAS

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Almost daily, the anemic patient consults the physician. Not unlike the general field of medical science, proper and intelligent treatment depends on proper diagnosis. With the advent of present-day methods, the old classification of anemias, into so-called primary and secondary groups, is fortunately rapidly falling into the discard.

It is the purpose of this paper to call to the attention of the practicing physician a working classification for anemias based upon the peripheral blood picture. Nothing stated in this paper is entirely original, but the use of such methods in diagnosis and treatment has convinced me of their value. An endeavor is made to be as simple and practical as the subject permits.

The classification submitted is one based upon so-called corpuscular constants; that is to say, the mean corpuscular volume (C. V.) the mean corpuscular hemoglobin (C. H.) and the mean corpuscular hemoglobin concentration (C.C.). It is deemed well to touch upon each briefly at this point.

The determination of the mean corpuscular volume is of greatest importance, and yet in itself is quite simple. An accurate measuring tube or hematocrit is used to determine the volume of packed cells in a given quantity of blood by centrifuging to constant volume a specimen to which a suitable anticoagulant has been added. The red cell count is then done in the usual, accepted manner, using a diluting pipette and counting chamber. From the figures thus obtained, the mean corpuscular volume is readily computed by use of the following formula:

$$\begin{array}{lcl} \text{Mean Corpuscular} & & \text{Volume of packed red cells} \\ \text{Volume C. V. in} & = & \text{(in cc. per 1000 cc. of blood} \\ \text{cubic microns} & & \text{R. B. C. (in millions per c. mm.)} \end{array}$$

Determination of the Mean Corpuscular Hemoglobin: The mean corpuscular hemoglobin, or the average amount by weight, of hemoglobin in the red cells, is determined by dividing the amount of hemoglobin, expressed in grams per 100 cc. of blood by the number of red cells, expressed in millions per cubic millimeter. The formula is thus:

$$\begin{array}{lcl} \text{Mean Corp. Hemo-} & & \text{Hemoglobin (in gm. per} \\ \text{globin C. H. in} & = & \text{1000 cc. of blood} \\ \text{micromicrograms} & & \text{R. B. C. (in millions per c. mm.)} \end{array}$$

For the hemoglobinometer an accurate instrument is essential. I have employed a Haden-Hausser with good results.

The Mean Corpuscular Hemoglobin Concentration:

This is an expression of the average concentration, or saturation of the red cells with hemoglobin. It is determined by dividing the amount of hemoglobin, expressed in grams per 100 cc. of blood, by the volume of packed red cells, expressed in cubic centimeter per 100 cc. of blood, and multiplying the result by 100. The result is expressed in per cent.

The formula is thus:

$$\begin{array}{lcl} \text{Mean Corp. Hgb.} & & \text{Hemoglobin (gm. per 100} \\ \text{Concentration (C.C.)} & = & \text{cc. of blood} \\ \text{in per cent} & & \text{Volume packed R.B.C.} \\ & & \text{(C.C. per 100 cc. of blood)} \end{array} \times 100$$

It must be emphasized that the technical determinations must be accurately made, using only standardized instruments and done by competent workers. All present-day laboratories should be equipped for such procedures.

An illustration of the calculation is as follows:

A blood sample contains 5.0 million red blood cells, 15 grams of hemoglobin per 100 cc. of blood, and 40 cc. of packed red cells per 100 cc. of blood.

Then

$$\text{mean corp. volume C.V.} = \frac{400}{5} = 80 \text{ cubic microns}$$

$$\text{mean corp. hgb. (C.H.)} = \frac{150}{5} = 30 \text{ micromicrograms}$$

$$\text{mean corp. hgb. concn. (C.C.)} = \frac{15.0 \times 100}{40} = 37.3\%$$

Normal values for the foregoing determination have been expressed by numerous investigators. They vary to no appreciable extent. For the sake of convenience and simplicity, those of Wintrobe are given in the tables. They have been found quite satisfactory for use.

TABLE I.
Normal Values for Size, and Hemoglobin Content of Erythrocytes.

	Average Minimum Maximum		
Mean Corp. volume (C.V. in cubic microns.....	87	80	94
Mean Corp. Hemoglobin (C.H.) in micromicrograms	29.5	27	32
Mean Corp. Hemoglobin Concentration C.C. in per cent	35	33	38

The normal red cell is therefore remarkably constant in its size, and hemoglobin content.

In disease, however, wide and interesting variations are noted.

The following classification is based upon such variations. It is rapidly gaining popularity because of its simplicity, accuracy, and therapeutic importance.

TABLE II.
Size and Hemoglobin Content of Erythrocytes in Various Types of Anemia.

Type of Anemia	Mean Corp. volume.	Mean Corp. Hgb.	Mean Corp. Hgb. Concentration.
1. Macrocytic	95-160	30-52	31-38
2. Normocytic	80-94	27-32	33-38
3. Simple Microcytic.....	72-79	22-26	31-38
4. Hypochromic Microcytic	50-71	14-21	21-29

Using this scheme, any anemia is readily classified into one of the four groups simply by determining the mean corpuscular volume, the mean corpuscular hemoglobin, and the mean corpuscular hemoglobin concentration.

Without discussing the details of underlying pathological processes, may it suffice to state that there are rigid indications for certain therapeutic measures in each group.

Admixtures of these measures are being used daily, so-called shotgunning the treatment. This is found unnecessary by those working with proper diagnoses.

In a macrocytic anemia, whether it be the anemia of pregnancy, the Addisonian type, or that of spruce, liver is indicated, and iron is useless. Again, in the hypochromic microcytic type, regardless of the cause, iron in large doses is indicated, and liver proves useless.

A brief discussion of the four groups and their therapeutic indications is as follows:

Group I, or the macrocytic types, occur in five important conditions; namely, pernicious anemia, the pernicious anemia of pregnancy, spruce, Bothriocephalus infection, celiac disease and some cases of pellagra. Certain other cases exhibiting gastric mucosal pathology, as gastric carcinoma, syphilis and gastrectomized individuals may also exhibit similar changes. The point is, all are benefited by the administration of liver,

either whole or the extract (powdered or aqueous, given orally, intramuscularly or intravenously). Ventriculin and Vitamin B are also often useful.

If the method of classification does nothing more than to prove accurately the presence or absence of a macrocytic anemia, it justly deserves a place in medicine. Many cases other than those of this group are being erroneously subjected to expensive and more or less disagreeable liver therapy.

Group II, or the normocytic type, includes cases of acute hemorrhage, hemolytic anemia (congenital or acquired) malaria, aplastic anemia, intestinal parasites, sickle cell, myelogenous and lymphoid leukemia, and poisoning. The treatment is transfusion, and the general measures are rest, diet, etc.

Group III, or the simple microcytic type, include cases of nonbleeding carcinoma, early Banti's disease, cirrhosis and the chronic infections. The treatment is first to remove the cause if possible, general measures, diet, rest, etc. Give hydrochloric acid if gastric analysis proves its absence. The use of iron in these cases, where the cause cannot be eradicated, is of but little value.

Group IV, the hypochromic microcytic type. It is in this form that there is often but little or no reduction in the number of red cells. It is often, though not invariably, associated with achlorhydria. It seems to occur commonly in those persons who have partaken of a diet low in hemoglobin building substances over a long period of time, or those suffering from a chronic blood loss as in ulcer or bleeding carcinoma. Chlorosis also falls in this category. It is in these cases that large doses of iron are to be given and spectacular results to be expected. Liver and its fractions appear useless.

SUMMARY

1. Attention is called to a classification of the anemias based solely upon the examination of the peripheral blood.
2. Methods used in such a classification are simple, yet invaluable, both to diagnosis and treatment.
3. Errors in diagnosis and failures in therapy will gradually diminish as the profession adopts the use of such a classification.

SANE OR PSYCHOTIC?*

W. C. McCONNELL, M.D.,

St. Petersburg.

The general practitioner of medicine is not much interested in a refined catalogued classification of mental diseases. He does want to know a simple formula that he may recall to mind to apply to his patient in his office at the only time that he thinks of psychiatry. This prescription must cover four points, in addition to therapy, namely: (1) where sanity ends and psychosis begins; (2) a general idea of prognosis based on symptoms rather than diagnosis; (3) whether the aberrations are unusually dangerous to the patient or others, and (4) a minimum routine examination in addition to a complete physical examination that would probably detect neurological lesions or somatic diseases simulating psychosis.

Before answering the first hypothesis as to where insanity begins, a review of the definition of insanity will secure a common understanding of the term.

Insanity is a more or less persistent departure from normal thinking, talking and acting, not altered by reason or proof. It excludes deliriums, intoxications and sleep disturbances and infers duration and qualitative affection as contrasted to feeble-mindedness, which is a retardation and quantitative defect.

For a patient to fulfill the postulate of psychosis, he must present at least one of eight cardinal symptoms in a more or less persistent manner, not altered by reason or proof. These fundamental symptoms may be amassed into Group I and Group II of equal numbers. The majority of cases showing symptoms of Group I, will present signs of Group II.

The members of Group I with definitions and examples are:

1. Hallucination is a sensation without an object.
Example: Were I to think that I had heard a bell ring and all in this room refused to agree with me that a bell had sounded, and I accepted the decision of the majority, it would have been an auditory hallucination, but not of the insane, because I accepted proof of my error. But were I to persist in the conclusion against all reason and proof, then it would be a hallucination of the insane. Hallucinations effect all special senses.

2. Illusion is a misinterpreted perception.

Example: Were I to step on the garden hose, jump and declare it was a snake, this would be a logical mistake, for snakes are found in gardens and the body contour resembles a hose. But were I to refuse proof after one of you had picked the hose up and showed me my error, then the error would be an illusion of the insane.

3. Delusion is a false belief. Delusions may be systematized or unsystematized, expansive or depressive, and somatic.

Example: Were I to receive a check from a patient, I would be surprised and overjoyed. This is a normal reaction for a poor medico. But were the bank to return the check marked "N. S. F." and I continued to believe myself enriched to the amount of the check, then that would be a delusion of the insane.

4. Disorientation is confusion regarding time, place and person.

Example: Were I to think that this day is Thursday, it would be a reasonable error, because New Year's Day seemed like Sunday, but were I to insist that it were Thursday, after all of you said that it was Friday and showed me a calendar or other proof that would be accepted by normal minds, then I would be justly considered to be insane. This may be likewise applied to place and person.

The symptoms of Group II with definitions are: (1) defect of insight is an inability to appraise one's mental reaction; (2) defect of judgment is an inability to decide matters as decisions are made by others; (3) defect of attitude is an abnormal reaction to others; (4) defect of behavior is an abnormal deportment.

In eliciting mental reactions for quantitative defects, education and environment must be considered. Defective memory may be a definite error of the insane patient, but it is too common a failing among normal people to consider it a principal symptom. Memory of the past may be crowded out normally by present thought and inattentiveness may impair ability to remember present happenings. Increased tension of the individual is likewise too common a symptom among normal people to indicate psychosis alone, although it is observed in all the excited phases of insanity. Lack of cooperation and interest implies a quantitative defect, and is found in physically ill as well as mentally sick patients.

*Read before Pinellas County Medical Society, St. Petersburg, January 8, 1934.

This grouping gives a basis for prognosis to reply to the second conjecture, for a patient having Group I symptoms are less likely to recover fully than patients showing only symptoms of Group II, excepting toxic psychosis and early cerebrospinal syphilis. Manic depressive psychoses may have periods of normality. Patients suffering only Group II symptoms give a guardedly favorable prognosis, feeble-mindedness excluded.

The usual thought that psychiatry is a hopeless part of medicine is not correct, for about 90% of all cases seen in private practice are definitely rehabilitated.

The third speculation may be rejoined by stating that all victims of insanity may be potentially dangerous to themselves or others. However, the risk is minimum except in psychotic epilepsy with furor and schizophrenia. These sufferers are prone to murder. Other types are treacherous by accident. The maniac might bounce a brick on your head, but please be assured that it would not be premeditated and would be probably without malice and in a spirit of fun. The average risk is important to know, because relatives will call on your judgment either to recommend immediate confinement or to allow them time to become resigned to the fact that such action is the proper thing for the patient.

The fourth declaration regarding a minimum routine examination in addition to the general physical survey may be summarized at the end of this paragraph after brief comment. The so-called functional psychoses must be differentiated from disorders due to neurological lesions or somatic diseases. It is unfair to the patient to pass judgment until all possibilities of finding and relieving a cause have been excluded, for mental diseases of endocrine and toxic origin will often simulate true insanity. It is possible that psychiatrists will remember with chagrin in years to come of having ever classified a psychosis as of functional etiology, much as Judson Deland and Victor Schilling have individually shamed the internists from using idiopathic anemia in their vocabularies. However, as we know the subject now, mental diseases may be the cause or effect of body dysfunction.

The following outline will probably suffice to detect in a general way, almost any central or peripheral neurological disability. In case of suspected multiple sclerosis, the testing of the abdominal reflex is important, but it is an awkward

reflex to include in a routine for female patients. Ten minutes additional time consumed on neurological reflexes is well spent.

- Apparent age
- Vision: Right.....Left.....
- Diplopia
- Pupils: Regular..... Equal.....
Size..... React.....
- Hearing: Right..... Left.....
- Speech
- Sensation
- Vasomotor and trophic.....
- Voluntary motion.....
- Spasm or tremor.....
- Reflexes: Biceps.....Triceps.....
Oppenheim
- Expression
- Field of vision.....
- Nystagmus
- Ophthalmoscopic: Right.....Left.....
- AccommodationSmell.....
- Tongue: Deviates to.....Tremor.....
Scars
- Nerve status
- Gait..... Station.....
- Muscle tone
- FFT & FNT.....Vibratory.....
- Knee..... Achilles..... Ankle.....
- Babinski

The following laboratory work should be done in every case:

- Urinalysis.
- Blood Kahn test. If cerebrospinal disease is suspected, then spinal fluid cell count, protein content, sugar content, Kahn test and colloidal gold curve are indicated.
- Blood count as recommended by Schilling.
- Metabolism test. Often a glucose tolerance test is indicated to help detect endocrine disturbance.
- General fluoroscopy is of excellent advantage if a fluoroscope is conveniently available.
- From these findings, further indicated tests should be ordered.

The small town loses patients to large clinics, not because its physicians are less capable, but because they do not use things at hand to good advantage. We try to conserve the patient's funds and receive criticism as a reward.

ANOMALIES OF THE KIDNEYS AND URETERS*

G. F. HIGHSMITH, M.D.,
Arcadia.

To be truly a physician we must first learn anatomy and, second, pathology. You can't treat an organ successfully unless you know its normal state and then determine to what extent and in what way it has become diseased.

There are many changes, however, that are natural but not normal, and these we speak of as anomalies. The genito-urinary tract seems to lead the organs of the body in these natural deviations from normal. Probably if I substitute the term congenital for natural it will be clearer.

Briefly I will review the embryology of the kidney and ureter:

The development of the segmenting ovum is systematic and orderly, and the designs of the Creator are specific. Each cell or group of cells does its part. Otherwise at birth, instead of a perfect infant, there might be a monster or a conglomerate mass of tissue. You cannot understand any reason for an anomaly until you know something of the embryology.

Chetwood gives a most excellent chapter on this subject. According to him the segmenting ovum divides into the ectoderm and entoderm. The intervening space is termed the segmentation cavity. The cells forming in this cavity form the mesoderm. The mesoderm divides into the layers enclosing the pair of cavities called the coelom. The external layer with the epiblast constitutes the somatopleure, and the internal with the hypoblast forms the splanchnopleure from which is developed a primitive gut, the posterior segment of which, the hind-gut, a depression, is termed the cloacal fossa. The bottom of the depression consists of ectodermic and entodermic cells with no mesoblastic interposition. This mass constitutes the cloacal membrane. The hind gut extends behind as the caudal gut and ends in a blind recess. This is the first trace of the allantois. The intermediate cell mass, (urogenital germ), is situated at the depth of the coelom. Here too is the wolffian body (mesonephros), visible about the third week.

So now is laid the basic embryonic cell tissue from which, by a process of budding, the urogenital organs are developed.

PERMANENT KIDNEY

Three glands enter into their formation, the mesonephros, pronephros and metanephros.

The first two degenerate but the metanephros develops into the kidney as seen at birth. They are situated in the bony pelvis and as fetal development progresses they ascend to their normal position. Synchronously with their ascension by a process of budding the ureters start from the mesonephric duct. They ascend backward and upward. The upper extremity dilates to form the pelvis of the kidney; forms also four pouches which are the permanent calyses. Budding continues and they penetrate the surrounding nephrogenic structure. Thus it is fused with the kidney tissue.

Numerous blood vessels have already entered the embryonic kidney substance. These afferent blood vessels may be excessive in number, and they play a very important part in kidney anomalies.

Chetwood remarks that, "Generally kidney anomalies are vascular in origin, and no fundamental kidney substance will develop when there are no pre-existing blood vessels." Naturally the question would arise: if there are supernumerary vessels, and consequent excessive kidney tissue, does a second ureter bud from the mesonephric tissue to supply ample drainage for the future kidney excretion?

Further discussion of the embryology would take unnecessary time but there are one or two points to be remembered: first, the kidneys begin their development in the bony pelvis, and ascend; second, the ureters also begin by a process of budding in the bony pelvis, but from a different tissue, and ascend. However, they are not connected with the kidney proper until it has partially ascended, probably about three months. Third: Blood supply. The tissue can live and develop only in proportion to its blood supply. Should there be more blood vessels than normal, the germinating kidney tissue has the support for over-development. These accessory blood vessels, often in later life, are the cause of blocking or blockage of the ureter or the pelvis of the kidney itself. The blood vessels may be absent entirely as a result of which the kidney tissue does not develop, or develops very poorly.

Renal anomalies may be classified as to:

1. Shape.
2. Location.

*Read before DeSoto-Hardee-Highlands County Medical Society.

3. Number.
4. Stage of development.

Anomalies of the ureters are classified according to:

1. Number.
2. Course of direction.
3. Form, (a) Stricture.
(b) Valves.
(c) Dilation (Megalo ureter.)
4. Origin and Termination.

Kidney shape is of considerable importance, but probably not so much of importance as is the number and location. When a kidney is ectopic it may be confused with tumors. The most usual displacement is for the kidney to remain in the pelvis or the iliac fossa; to ascend to just above the brim of the pelvis or the lumbar region. When it fails to ascend, it also fails to rotate. The true cause for its failure to ascend is not known. Shapes may vary from that of complete horse shoe to simple masses of kidney tissue.

A complete supernumerary kidney is extremely unusual but we must hold in mind that one kidney may be congenitally absent, or congenitally atrophied and of no functional value. This is important and must ever be held in mind should occasion arise for removal of one kidney. When one kidney is absent the other compensates and is enlarged. The most frequently found increase in number is in the form of a unilateral fused kidney with two pelves and two ureters, but a single capsule.

The ureters may adjoin before entering the bladder, but separate orifices are to be expected when we remember that the ureters start as a bud from the wolffian duct, and ascend.

BILATERAL DOUBLE FUSED KIDNEY, WITH PELVIS AND URETER

This is extremely rare. Recently, Thomas Martin Luque, of Madrid, Spain, reported one case which was published in the *Urologic and Cutaneous Review*, in July, 1932.

His patient when first seen had a marked cystitis which was cleared up by treatment with gomenol oil.

CASE REPORTS

No. 1—*Unilateral Double Fused Kidney.*

Female, age 34, mother of several children. Usual diseases of childhood. Heart, lungs and

abdomen were normal and body development generally normal.

For several years she had had attacks of pain in the right kidney region. This would last for twelve to twenty-four hours during which time her urine would be clear. As the pain would subside the urine would have the appearance of containing pus. This pain was of an aching pressure type. Cystoscopic examination, December, 1932, revealed the urethra and bladder normal, the left ureteral orifice normal. There were two ureteral orifices on the right side. Catheters were passed and specimens obtained from each.

The upper pelvic specimen contained: pus—O, blood—O, cast—O, epithelium—O, albumen—O.

Function: amount—15 minutes—7 cc.

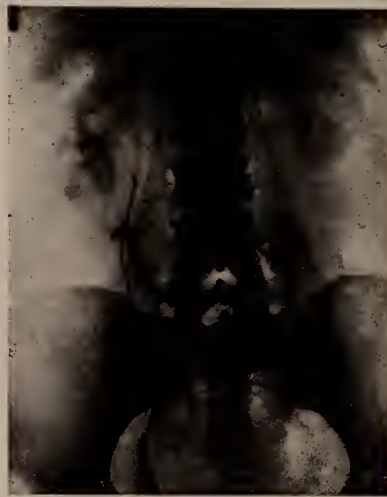
Test: phenolphthalein—10%.

A pyelogram revealed a small upper pelvis. Calices were not well outlined.

Lower pelvic specimen contained: pus—abundant; blood—small amount; cast—O; epithelium—small number; albumen—trace. Cloudy.

Function: amount—15 minutes—24 cc.

Test: phenolphthalein—18%.



Unilateral.

A pyelogram revealed: lower pelvis large and irregular shape. Strictured at ureteral juncture.

The left kidney was negative.

This patient was relieved by passing the catheter and irrigating the lower kidney pelvis.

No. 2—*Double Bilateral Fused Kidney Ureters.*

Plate A



Catheters in Site.

Female, age 28. Married. Three children. Extreme blonde. Usual diseases of childhood, but no other illness.

Four years previously, after the birth of her last child, she experienced pain in the right quadrant of the abdomen. This pain was of an aching character and could be relieved only by an opiate. These attacks were irregular, but frequent. In July, 1932, she was referred to me for general kidney ureter and bladder examination.

Cystoscopic examination showed that the urethra was normal and the bladder normal, except for mild congestion of the trigone and the presence of four ureteral orifices.

Plate B



Pelves Injected with Sodium Bromide.

After careful study and examination each of the four ureteral orifices were catheterized. The catheters passed easily into all the pelves except the upper right at which point resistance was met and the patient remarked that this was the seat of her old pain.

Results: Left external ureteral orifice draining the lower pelvis.

Urine: Amount—15 minutes—18 cc.

Test: phenolphthalein—excretion 35%. No pus or blood, clear. Left internal ureteral orifice draining the upper pelvis and kidney.

Amount—15 minutes—10 cc.

Test: phenolphthalein — excretion — 10%. Clear, no pus, no blood. Right external ureteral orifice draining the lower pelvis and kidney.

Amount—15 minutes—20 cc.

Test: phenolphthalein — excretion — 35%. Clear, no blood, no pus. Right internal ureteral orifice draining the upper pelvis and kidney.

Amount—15 minutes—8 cc.

Test: phenolphthalein—excretion—5%. Pus, cloudy, blood, epithelium.

For comparison, Luque's case is as follows:

Left superior side (left inferior ureteral orifice; superior pelvis):

Amount—20 cc.

Urea per liter—5.6.

Chlorides per liter—5.8.

Sediment, some blood and epithelial cells.

Left inferior side (left superior external ureteral orifice; inferior pelvis):

Amount—12 cc.

Urea per liter—22.6.

Chlorides per liter—8.5.

Sediment, some blood.

Right superior side (right inferior urethral orifice; superior pelvis):

Amount—10 cc.

Urea per liter—7.9.

Chlorides per liter—12.7.

Sediment entirely of blood, no pus or bacteria.

Right inferior side (right superior external ureteral orifice; inferior pelvis):

Amount—10 cc.

Urea per liter—18.3.

Chlorides per liter—10.

Sediment, some blood and nothing abnormal.

These show the upper kidneys to be less well developed.

With the four catheters in sight, x-ray pictures were made, also pyelograms, using sodium bromide 12½% solution for injection. The pelves of the two upper kidneys are small.

At a later date neo iopax was given intravenously and a series of pictures made. The iopax was excreted by each kidney as was shown by the x-ray.

The unequal elimination and the presence of independent pelves and ureters tend to substantiate Luque and Legueu, that these cases are to be classified as four distinct kidneys. Though they be fused as a single kidney they have different function and position. One is more perfectly developed than the other. The pelves are completely separate and Legueu avers that he has demonstrated distinct blood vessels which do not anastomose with those of the twin organ.

Returning to the practical phase of this case the patient, as stated before, had pain in the right kidney region. This was found to be due to stricture of the ureter draining the upper pelvis. She was relieved by passing the catheter.

Hunner states that congenital defect of the ureter becomes of primary importance if it is of a nature to interfere with renal drainage. The mere existence of an accessory ureter or kidney need have no clinical significance.

Anomalies of the ureters have been classified previously. Clinically, stricture, origin and termination are of the greatest importance.

Stricture may be a result of outside pressure, scar tissue, congenital narrowing of the lumen, etc.

Origin and insertion of the ureters play an important part as to the well-being of the individual. The origin of the pelvis and ureter is from the convex border in horse shoe type.

Cases have been reported by Frank Hinman in which the ureters terminate at points other than the bladder—the seminal vesicles, ejaculatory duct; in the female, the vagina, vulva, uterus, etc.

I recall one case, seen as a student, in which the ureters emptied themselves on the anterior wall. (Exstrophy).

ACTIVE IMMUNIZATION AGAINST DIPHTHERIA*

W. T. HARRISON, M.D.,

Surgeon, U. S. Public Health Service.

Our knowledge of the fundamental principles underlying immunity to diphtheria has advanced so rapidly during the past 20 years that we are now in the position that, should we be able to apply our knowledge to the immunization of the population, diphtheria as a disease of childhood would completely disappear. With the Schick test we are able to separate susceptible individuals from those who are immune and with diphtheria toxoid we can readily immunize all susceptibles.

Progress in diphtheria control has been very rapid in the United States since 1915. The mixtures of diphtheria toxin and antitoxin which were first used had many objectionable features, but the great good accomplished by these agents largely outweighed their disadvantages. Toxin-antitoxin mixtures were toxic, unstable, and the most effective preparations contained varying amounts of horse serum which seemed to increase the sensitivity of some individuals to later therapeutic injections of serums prepared from the horse.

Most of these objectionable features of toxin-antitoxin mixtures became only of academic interest after the profession became familiar with diphtheria toxoid which was introduced by Ramon of the Pasteur Institute in 1923. This product is prepared by adding formalin to diphtheria toxin and subjecting to a low degree of heat until all toxicity is lost. The immunizing value is not injured by this treatment. Since toxoid contains nothing but the broth, from which the toxin was prepared, and products of metabolism of the diphtheria organism, the possibility of sensitizing large numbers of individuals to horse serum as a result of diphtheria immunization need no longer be considered.

Various modifications of toxoid have been made since its introduction by Professor Ramon, probably the most valuable being the method of precipitation by the addition of potassium alum. This precipitate is many times as active as an immunizing agent as the toxoid from which it was precipitated, probably due to the slowness with which it is absorbed, permitting the antigenic action to be exerted over a longer period of time. One dose will immunize as large a percentage of

*Broadcast at meeting of Florida Public Health Association, St. Petersburg, December 5, 1933.

Schick positive children as two or three doses of original crude toxoid. All batches of toxoid are prepared under license of the Treasury Department, and are subjected to tests for safety, potency and sterility outlined by the Public Health Service. The product may be obtained through the usual channels and may be used with confidence by the profession.

New-born children are as a rule immune to diphtheria during the first six months of life. This immunity is lost at about age six months and the child is then usually completely susceptible. These very young children are not so heavily exposed to infection as are older children, but due to complete susceptibility and difficulty of diagnosis diphtheria in them is an exceedingly dangerous disease. If the child is permitted to go unimmunized he will have approximately 8 chances in 10 of producing his own active permanent immunity by the time he reaches age 12. However, during this period he will be subjected to the very real danger of contracting clinical diphtheria, the danger being greater the earlier in life the infection is acquired. Active immunization by the injection of diphtheria toxoid simply provides for the child early in life, when he needs it most, the same type of immunity that he will acquire at a later period for himself and without the attending dangers of clinical diphtheria in an infant. It is excellent practice to immunize all children as soon as possible after age six months. The physician should insist upon performing this very necessary service for children for whose physical welfare he is responsible. The injection in young children is almost entirely devoid of disturbing reactions. Occasionally malaise with slight fever may follow, but as a rule there is no evidence other than the slight painless induration at site of inoculation which may persist for four to six weeks when precipitated toxoid is used. Ordinary fluid toxoid does not cause the local induration but at least two doses with an interval of three to four weeks are necessary.

Such a high percentage of children under six years are susceptible to diphtheria that it is questionable if application of the Schick test to this age group is necessary or desirable. Children object to the Schick test more than to the injection of toxoid since the injection of 0.1 cc. into the superficial layers of the skin is more painful

than subcutaneous injection of a larger amount. Should a small number of children of this age have already produced their own immunity and be included among the non-immunes and injected with toxoid, the injection would only tend to raise their immunity to a higher point which would certainly cause no harm to the child. For these reasons health authorities are coming to recommend that children under six years be immunized without preliminary Schick testing.

After passing age six years children tend to become naturally immune in greater numbers and the application of the Schick test to these will separate a considerable number of immunes from those requiring injection. Schick testing these older children is advisable also since individuals who have come in contact with the diphtheria bacillus in the self-immunizing process sometimes become hyper-sensitive to diphtheria protein. Such allergic persons may show local or general reactions to toxoid which should not be injected except when required to immunize a susceptible child.

The Schick test may be done from eight to twelve weeks after the immunizing injection has been given, but it will be found after using precipitated toxoid that not more than 5% of previously Schick positive children will have remained so. In view of the very small number of children who remain Schick positive after treatment it is believed that at least in the immunization of large numbers of children the use of the post-immunization Schick test will be discontinued.

Present-day knowledge of the prevention of diphtheria indicates the advisability of actively immunizing children as soon as possible after they reach the age of six months. Children in the age group of six months to six years furnish a very large proportion of the deaths from diphtheria, and immunization of this group will have a marked influence upon the death rate. A preliminary Schick test in this group is not necessary. The difficulty of reaching these children is very great and to carry out a comprehensive plan among such children cooperation among physicians, health officers and mothers is necessary. The importance of concentrating our efforts upon this age group can not be too strongly emphasized.

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The Journal of the Florida Medical Association, Inc.

Owned and published by the Florida Medical Association, Inc.

Accepted for mailing at special rate of postage provided for in Section 1103, Act of Congress of October 3, 1917; authorized October 16, 1918.

Published monthly at Jacksonville, Florida. Price \$3.00 a year. Single numbers, 30 cents.

Contributions for publication in this journal, whether scientific papers or reports of County Secretaries, should be typewritten.

Address Journal of the Florida Medical Association, Inc., Box 81, Jacksonville, Fla. Telephone 5-0577

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GROUP INSURANCE

The Aetna Life Insurance Company's group policy is now recommended to the members of the Association in accordance with a resolution passed by the House of Delegates in session in Jacksonville during the Sixty-first Annual Convention. Any member of the Florida Medical Association in good standing is eligible for insurance with this company.

The premium rates under the Aetna policy are uniform and any member obtaining malpractice insurance from this company is to be charged these uniform rates without regard to the place of his residence in the state of Florida.

The rates for insurance under the group policy of the Aetna Life Insurance Company appear below.

FLORIDA MALPRACTICE RATES

Physicians and Surgeons (Group Form Only)

Limits of Liability Any One Claim	Limits of Liability For All Claims During Policy Period of One Year	Premium
\$ 5,000	\$ 15,000	\$20.00
10,000	15,000	24.80
10,000	25,000	26.66
10,000	30,000	27.40
15,000	45,000	33.40
20,000	40,000	35.40
20,000	60,000	37.20
25,000	50,000	38.80
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Other limits will be furnished on request.

In addition to the above charges, there will be an additional premium of \$75.00 for x-ray therapeutic treatment and this provides the basic limits of \$5,000/15,000 coverage. No charge for radium.

There is an additional coverage, known as "Business Liability" insurance which the Company insists on writing where there may exist copartnerships, clinics or doctors employing assistant doctors or technicians. The coverage under the Business Liability policy is designed to cover the liability of a doctor because of his connection with a copartnership, clinic, hospital, etc., that arises from the acts of another doctor or employed assistant in a case in which the assured doctor has not seen the patient or directed the treatment to be given.

Business Liability policy covering risks classified above is issued subject to each partner or employed doctor carrying personal liability at the rates above quoted. The rate charged for partners and employed doctors under Business Liability policy is one-third (1/3) the individual rate for a doctor. Rate for x-ray technician, pathologist, etc., is \$11.25 for limits of \$5,000/15,000. No charge for nurses.

The complete report of the recommendation by the Executive Committee, which was acted upon by the House of Delegates, may be found in the May, 1934, Journal on page 522.

STATE NEWS ITEMS

Dr. C. E. Tumlin of Miami recently attended the graduation festivities at Brenau Academy, Gainesville, Georgia, where his daughter, Marjorie, graduated. He was also an honor guest at Riverside Military Academy.

* * *

Dr. Henry Hanson, State Health Officer, attended the Conference of State and Provincial Health Authorities of the United States, Canada, Hawaii and the Philippines in Washington, D. C., recently. This is an annual event when the administrative health problems are discussed with the Surgeon General of the United States Public Health Service.

* * *

Dr. J. L. Kirby-Smith of Jacksonville was a guest of the Muscogee County Medical Society at their June meeting, held in Columbus, Georgia. He addressed the members on "Vegetable Parasitic Skin Diseases." While in Columbus, he was entertained by the Society at a smoker.

Dr. J. L. Kirby-Smith of Jacksonville presented "Diseases of the Skin" at the Quarterly Clinic of the Ware County Hospital, Waycross, Georgia, on May 29th. Following the meeting, he was a guest of the society at a sea-food dinner held at the Elks Club.

* * *

Dr. James L. Estes of Tampa recently attended the meeting of the American Urological Association at Atlantic City. Following this, he spent some time at the Brady Urologic Clinic in Baltimore.

* * *

Dr. and Mrs. E. J. Melville of St. Petersburg left recently for San Francisco via the Canadian Pacific. After a short visit with relatives in Winnipeg and Vancouver, they will embark on the Chicibu Maru for a trip around the world, returning about October 15. While on this trip, the doctor will work a month with Prof. Gessman of Vienna with whom he was associated last summer.

* * *

Dr. Gordon Ira of Jacksonville is the new Junior Chamber of Commerce golf champion of that city.

* * *

The Orange County Medical Society will hold a picnic Saturday afternoon, June 30. All members of the Florida Medical Association are cordially invited to this "stag" picnic. The officers of the Orange County Medical Society advise that they are going to barbecue a whole beef and some pork and will have lots of Brunswick stew and what goes with it. This annual picnic will take place at Lakeside Park, Orlando, where it was held last year. Orange County doctors urge you to come and have a good time.

* * *

Dr. W. M. Rowlett of Tampa spent some time in New York and Washington the latter part of May.

* * *

Dr. A. Daniel Amerise of Coral Gables is spending some time at the Post-Graduate Medical School of Harvard University.

DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Park Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

Dr. R. E. Repass of Miami Beach recently returned from Roanoke, Virginia, where he took a post-graduate course at Gill Memorial Hospital.

COMPONENT COUNTY SOCIETIES

DADE COUNTY MEDICAL SOCIETY

At the regular meeting of the Dade County Medical Society, held in the Huntington Club Rooms, June 1, the following program was presented:

"Hobbies", M. P. DeBoe, Miami.

"Sinusitis In Its Relation to General Systemic Infection", R. E. Repass, Miami Beach.

PASCO-HERNANDO-CITRUS COUNTY MEDICAL SOCIETY

Dr. S. C. Harvard entertained the Pasco-Hernando-Citrus County Medical Society at the Woodland Golf and Country Club, Brooksville, on Friday evening, May 18, 1934. A full course chicken dinner was served by Mr. and Mrs. Good, which was followed by a scientific meeting with Dr. Harvard, Vice-President, presiding.

Dr. C. B. Stewart, of Steiner Clinic, Atlanta, Ga., gave a talk, with lantern slide demonstration, of skin lesions and breast tumors, with an outline of treatment, which proved very interesting to those present.

Drs. J. C. Dickinson, C. A. Andrews, Herbert Mills, all of Tampa, discussed this report.

Dr. R. Hugh Wood, of Atlanta, Ga., read a paper on glandular fever with one complete case report.

Dr. L. T. Furlow, of St. Louis, Mo., and Dr. V. O. Harvard, of Arabi, Ga., also gave interesting talks.

The following were present, as guests of the Society: Drs. C. B. Stewart, R. Hugh Wood, both of Atlanta, Ga.; Dr. L. T. Furlow, of St. Louis, Mo.; Dr. V. O. Harvard, of Arabi, Ga.; Drs. J. C. Dickinson, C. A. Andrews, Herbert Mills, W. C. Blake, Robert Nelson, all of Tampa.

ST. LUCIE-OKEECHOBEE-INDIAN RIVER-MARTIN COUNTY MEDICAL SOCIETY

THE ST. LUCIE-OKEECHOBEE-INDIAN RIVER-MARTIN COUNTY MEDICAL SOCIETY HAS BEEN ADDED TO THE EVER-GROWING LIST OF SOCIETIES WITH DUES 100% PAID FOR 1934. THIS SOCIETY HAS A MEMBERSHIP OF 13.

WOMAN'S AUXILIARY

TO THE
FLORIDA MEDICAL ASSOCIATION, INC.

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1356 Willowbranch Ave.,
Jacksonville, Florida

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PINELLAS COUNTY AUXILIARY

Members and guests of the Auxiliary to the Pinellas County Medical Society enjoyed a delightful luncheon at the Pipin' Hot tea room at Gulfport on Tuesday, April 10th.

Following the luncheon the regular business meeting was held at which Mrs. O. O. Feaster, second vice-president, presided in the absence of the president, Mrs. John Herring. Mrs. Prescott LeBreton, chairman of Hygeia, reported that about fourteen dollars had been pledged for the Hygeia fund. Mrs. Charles Hebard, treasurer, reported twenty-one paid memberships, and twenty-one dollars had been forwarded to the State Treasurer and that a check had been forwarded to the emergency school committee to cover the expense incurred in "adopting" a high school child. Mrs. Alvin Mills, Health Education chairman of the Auxiliary to the Florida State Medical Association, outlined the Folder which the State Board of Health has arranged to be distributed through the courtesy of the county units of the State Auxiliary.

The annual meeting with election of officers for the coming year was held immediately following the picnic lunch and swimming party at the Lions Beach Club April 27th; Mrs. Wyman W. Harden was elected president of the Auxiliary to the Pinellas County Medical Society. Other officers elected were Mrs. Franklin W. Roush, first vice-president; Mrs. A. P. Roope, second vice-president; Mrs. O. O. Feaster, recording secretary; Mrs. W. C. McConnell, corresponding secretary, and Mrs. B. L. White, treasurer.

Mrs. Alvin Mills, because of her known efforts in Auxiliary work, was asked to be program

chairman of the May Day luncheon held at the Shrine Club in conjunction with National child health day and terminating the week devoted throughout the nation to health problems in general. The luncheon was attended by representative business men and women, members of Parent-Teacher Associations, the Federation of Women's Clubs, Junior League, Women's Club and other organizations and by school principals and teachers, school nurses, physicians, dentists and others interested in the promotion of a health program.

Much credit is due Pinellas Auxiliary through Mrs. Mills, for the part they played in arranging this program which included talks by Dr. Mills, Dr. William M. Davis, Mr. E. H. Beckett, Dr. Fred M. York and Mrs. J. M. Tippy. The Rev. Dr. James A. McClune pronounced the invocation, which was followed with an address of welcome by John S. Smith, vice-Mayor of St. Petersburg. Mrs. Ralph Dell spoke briefly at the conclusion of the program, bringing to a close one of the best of the May day luncheons ever held in St. Petersburg.

POLK COUNTY AUXILIARY

The Woman's Auxiliary to the Polk County Medical Society met at the Sorosis Club House on Lake Morton Drive Wednesday evening, April 11, at seven o'clock. A lovely dinner was served, after which business matters were discussed and the following officers were elected.

President—Mrs. G. C. Overstreet, Lakeland.

Vice-President—Mrs. J. R. Boulware, Jr., Lakeland.

Sec'y-Treasurer—Mrs. J. L. Hargrove, Bartow.
Press and Publicity—Mrs. Walter A. Weed, Lakeland.

Mrs. G. C. Overstreet and Mrs. R. L. Cline of Lakeland were named delegates to the State Meeting in Jacksonville, and Mrs. V. H. Ragsdale of Pierce, and Mrs. S. F. Smith of Lakeland, were alternates.

ALACHUA COUNTY AUXILIARY

The regular luncheon meeting of the Alachua County Medical Auxiliary was held at the Primrose Grill May 8th, Mrs. J. E. Maines, president, presiding. After the business reports, plans were made for the observance of Hospital Day at which time the ladies of the Auxiliary assisted.

A gift of six dozen table covers and dresser scarfs were presented to the Alachua County

Hospital. A committee was appointed to investigate the cost and requirements of establishing a child's room in the hospital. Serving on this committee are Mrs. J. H. Hodges, chairman; Mrs. J. M. Bell, Jr., and Mrs. R. M. Summitt. Present at this meeting were ten members of the Auxiliary.

PICNIC AT SILVER SPRINGS

Members of the Medical Auxiliary of Marion and Alachua Counties held a joint picnic luncheon at Silver Springs May 15th, famed the world over as one of the showplaces of the country.

Luncheon was served picnic style in a glass bottom boat in which the ladies were motored seven miles over the famous transparent water. The fantastically patterned fish and gaudy foliage furnished a brilliant coloring to the setting. After the luncheon bridge was played.

The guests on this occasion were Mrs. E. W. Veal of Jacksonville, State President-elect, Mrs. S. E. Driskell, past State President, Mrs. Gordon Ira, President of Duval County Medical Auxiliary, and Mrs. S. M. Copeland, State Press and Publicity.

ADVERTISERS' NOTES

BORDEN'S EVAPORATED MILK

"Extensive work done on the food value and digestibility of milk has shown that pasteurized milk, unsweetened evaporated milk, and dried whole milk may be used one for the other."

This interesting and significant quotation is taken from an article entitled "The Doctor and the Family Budget", by Anderson and Gillett in the Medical and Professional Woman's Journal for March, 1934 (page 78). The authors point out that standard evaporated milk can be obtained at low cost, the savings on this high quality product often being the means of supplying the family with other necessary protective foods.

"Many mothers," they continue, "will not believe that unsweetened evaporated milk is beneficial for their children until the physician recommends it."

Physicians know that the advantages of evaporated milk have been amply demonstrated by clinical research and experience. In recommending an evaporated milk, however, it is desirable to specify an outstanding brand, such as Borden's, in order that patients will be assured of the product that will give the utmost satisfaction to them as well as to the physician.

Borden's was the first evaporated milk to be submitted to the Committee on Foods of the American Medical Association and the first to receive its seal of acceptance. Since 1930 Borden's has enjoyed the well-merited privilege of displaying this important seal.

PABLUM—MEAD'S PRE-COOKED CEREAL

Mead Johnson & Co. are now marketing Mead's Cereal in dried pre-cooked form, ready to serve, under the name of Pablum. This product combines all of the outstanding mineral and vitamin advantages of Mead's Cereal with great ease of preparation.

All the mother has to do to prepare Pablum is to measure the prescribed amount directly into the baby's cereal bowl and add previously boiled milk, water, or milk-and-water, stirring with a fork. It may be served hot or cold and for older children and adults cream, salt and sugar may be added as desired.

Mothers will cooperate with physicians better in the feeding of their babies because Pablum is so easy to prepare. It gives them the extra hour's rest in the morning and saves bending their backs over a hot kitchen stove in summer. Please send for samples to Mead Johnson & Company, Evansville, Indiana.

COCOMALT

Specialists in the study of child nutrition have been quick to recognize the value of milk as the mainstay of the child's diet.

"But what," asks the frantic mother of a youngster who dislikes milk, "can I do to make my child eagerly want that which he now rebels against?"

Today the doctor who is confronted with this query can solve this age-old problem by the helpful advice to mix Cocomalt with the milk. For by the simple addition of Cocomalt, milk not only becomes a delicious chocolate flavor drink—but its food-energy value is practically doubled. Cocomalt in milk provides extra proteins, carbohydrates and minerals (food-calcium and food-phosphorus). It is also a rich source of Vitamin D.

Thus Cocomalt not only induces youngsters to drink all the milk they require—it provides extra food-energy value as well and a rich supply of Vitamin D. Cocomalt is accepted by the Committee on Foods of the American Medical Association.

RABIES VACCINE, LILLY

Centuries ago it was known that long-haired dogs had rabies less frequently than short-haired ones, an observation easily explained by the mechanical removal of the infectious saliva by the hair. Clothing acts similarly to prevent the entrance of the virulent saliva into the tissues. The death ratio between those bitten on the bare skin and those bitten through clothing is approximately 9 to 1.

The mortality from rabies among those deeply bitten, as compared with those whose injuries are superficial, is in the approximate ratio of 4.4 to 1. The position of the bite may be classified under the headings: head, trunk, and extremities. The greatest number of wounds occur on the extremities, and the mortality ratio between head and extremity wounds is 22:1; between head and trunk injuries, 5:1; and trunk and extremities about the same. The shorter period of incubation in cases of bites near the brain and the higher mortality in treated cases accords with the accepted view that the transmission of the virus is along nerve trunks. The shorter the distance to be traversed, the shorter will be the period of latency, other factors being equal, and the less time there will be for the establishment of immunity through prophylactic vaccination.

The handicap of delayed treatment will be more pronounced in the case of subjects with bites in localities where a short incubation is to be expected, e.g., on the head, than in the case of those bitten in localities where long incubations are to be expected, e.g., on the leg.

On the other hand, it is to be expected that patients who have been badly injured will have treatment instituted with all possible speed, and owing to the severity of the bites the mortality rate may still be high. There is some indication in the available figures, however, that delayed treatment increases the mortality.

The above information is an abstract from the Physician's Bulletin, published by Eli Lilly and Company. Rabies Vaccine, Lilly, is said to be a readily available, dependable product. It is supplied through the drug trade in packages of fourteen standardized doses.

SQUIBB HALIBUT-LIVER OIL CONCENTRATE
TABLETS WITH VIOSTEROL 250-D.

A new product that has just been released by the Squibb Laboratories is Squibb Halibut-Liver Oil Concentrate Tablets with Viosterol 250-D.

These highly potent, chocolate-coated tablets will be prescribed by physicians as an alternative means of administering the vitamins of Vio-sterol-fortified Halibut-Liver Oil.

Each tablet equals in Vitamin A and D potency, 10 drops (approximately 10 mins.), of Squibb's Stabilized Halibut-Liver Oil with Vio-sterol 250-D. The vitamin-potency of the tablets is protected by the same methods that have been found to be so successful in affording similar protection in the manufacture of Adex Tablets.

George W. Merck, President of Merck & Co., Inc., announces the publication of the sixth edition of the Merck Manual of Therapeutics and Materia Medica.

Completely revised and expanded to include the latest developments in the progress of medicine, the new manual provides the physician with a convenient and dependable reference to modern essentials of diagnosis and therapy.

The sixth edition of the Merck Manual is printed on fine paper and bound in dark blue fabrikoid covers with gold stamping. It is available only to members of the medical profession, pharmacists, chemists and those in allied professions, at the nominal price of two dollars per copy, representing the actual cost of printing and distribution.

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When using proprietary infant foods "it is impossible to modify them to fit the needs of the individual infant."*

In other words, when proprietary infant foods are used, or as in some cases, prescribed, "accurate diagnosis and the indication for individual treatment of one of



the most complex and fateful problems in medicine" is left to the mother "and the directions on a tin can or a glass bottle."* When prescribing Klim Powdered Whole Milk, individual babies with their specific nutritional needs can be fed both scientifically and adequately.

*Morse, J. L., *Clinical Pediat.*, p. 184

*Brennemann, J., *Abt. Pediat.*, p. 718

AUTHORITY: "It would seem, offhand, as if an artificial food which contained the same food elements in the same relative proportions that they are in human milk would be a perfect food and answer as well as human milk. Experience has shown, however, that, while some babies will thrive on a food of this composition, it is not suitable for all babies or for all ages. While babies thrive throughout the nursing period on human milk of uniform strength,

they cannot take a food as strong as this in the early weeks and months and need a stronger food in the later months. Furthermore, no artificial food, although it may contain the same proportions and amounts of the different food elements, is the same as human milk. It is impossible to make an artificial food which is identical with human milk..." (Morse, J. L.—*Clinical Pediatrics*—[1926] p. 147-8).

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		Date	Time	Place	Luncheon ?	
Alachua	Harry M. Merchant, M.D., Gainesville.	2nd Tuesday	12:00 Noon	White House Gainesville	Yes.	86%
Bay	Allen H. Miller, M.D., Millville.					71%
Brevard	I. K. Hicks, M.D., Melbourne.	2nd Tuesday		Varies	Yes.	56%
Broward	O. C. Brown, M.D., Ft. Lauderdale.	Last Wednesday.	8:00 P.M.	Elks' Hall Ft. Lauderdale	No.	94%
Columbia	T. H. Bates, M.D., Lake City.	1st Monday	7:30 P.M.	Blanche Hotel Lake City		100%
Dade	Robert T. Spicer, M.D., Miami.	1st Friday	8:30 P.M.	Club Room Huntington Bldg. Miami	Occasionally.	92%
DeSoto-Hardee- Highlands	L. W. Martin, M.D., Sebring.	2nd Tuesday	8:00 P.M.	Varies	Yes.	93%
Duval	B. F. Woolsey, M.D., Jacksonville.	1st Tuesday	8:15 P.M.	Mayflower Hotel Jacksonville	No.	80%
Escambia	J. M. Hoffman, M.D., Pensacola.	2nd Tuesday	8:00 P.M.	Board of Health Building Pensacola	No.	68%
Hillsboro	John S. Helms, Jr., M.D., Tampa.	1st Tuesday	8:00 P.M.	Tampa Municipal Hospital Tampa	No.	100%
Jackson	Lewis Pierce, M.D., Marianna.	2nd Tuesday	7:30 P.M.	Hotel Chipola, Marianna	Yes.	91%
Lake	W. L. Ashton, M.D., Umatilla.	1st Thursday	12:30 P.M.	Eustis	Yes.	94%
Lee	Robley D. Newton, M.D., Ft. Myers.	3rd Friday	7:30 P.M.	Lee Memorial Hospital Ft. Myers	No.	100%
Leon-Cadaden- Liberty- Wakulla- Jefferson	O. G. Kendrick, M.D., Tallahassee.	Quarterly	3:00 P.M.	Varies	Yes.	96%
Madison	Geo. O. Davis, M.D., Madison.					100%
Manatee	W. D. Sugg, M.D., Bradenton.	3rd Tuesday	7:00 P.M.	Whitfield Country Club Bradenton	Yes.	100%
Marion	Richard C. Cumming, M.D., Ocala.	3rd Thursday	12:30 P.M.	Marion Hotel Ocala	Yes.	95%
Monroe	W. R. Warren, M.D., Key West.	1st Sunday	9:00 P.M.	Varies	Yes.	100%
Orange	John A. Pines, M.D., Orlando.	3rd Wednesday	8:30 P.M.	Varies	No.	100%
Palm Beach	R. Henry Baldwin, M.D., W. Palm Beach.	4th Monday	8:00 P.M.	Good Samaritan Hospital W. Palm Beach	No.	100%
Pasco-Hernando- Citrus	Geo. R. Creekmore, M.D., Brooksville.	2nd Thursday	7:00 P.M.	Varies	Yes.	100%
Pinellas	O. O. Feaster, M.D., St. Petersburg	1st Friday	8:00 P.M.	Assembly Room, 5th floor, P. & L. Bldg. St. Petersburg	No.	100%
Polk	J. R. Boulware, Jr., M.D., Lakeland.	2nd Wednesday in Feb., Apr., June, Aug., Oct., Dec.	1:00 P.M.	Lakeland	Yes.	94%
Putnam	E. W. Warren, M.D., Palatka.	2nd Thursday	7:00 P.M.	James Hotel, Palatka	Yes.	75%
St. Johns	Reddln Britt, M.D., St. Augustine.	3rd Tuesday	8:30 P.M.	Varies	Yes.	100%
St. Lucie-Okeech- bee-Indian River-Martin ..	J. D. Parker, M.D., Stuart.	3rd Thursday	8:00 P.M.	Varies	Yes.	92%
Sarasota	J. E. Harris, M.D., Sarasota.	2nd Tuesday	8:30 P.M.	Varies	Occasionally.	100%
Seminole	J. T. Denton, M.D., Sanford.	2nd Monday	7:00 P.M.	City Hospital Sanford	Yes.	100%
Sumter	W. E. Mitchell, M.D., Coleman.	2nd Tuesday		Varies	No.	100%
Taylor	C. A. O'Quinn, M.D., Perry.	Last Friday	8:00 P.M.	Dixie-Taylor Hotel Perry	Yes.	100%
Volusia	Joseph H. Rutter, M.D., Daytona Beach.	2nd Tuesday	7:30 P.M.	Varies	Yes.	97%
Walton- Okaloosa	A. G. Williams, M.D., Lakewood.	3rd Thursday	8:00 P.M.	Varies	Occasionally.	100%

NOTE—Secretaries: Please submit information to complete the above schedule.



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